

# aspiration

An e-magazine for aspiring & newly qualified  
Architectural Technology professionals

Issue 16  
Spring/Summer 2023

Meet the  
Technologists

How to write and  
structure your CV

Becoming a  
Chartered  
Architectural  
Technologist



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## A word from the Editor

Welcome to your spring/summer issue of *aspirATion magazine* and, as always, we're pleased to be bringing you another edition of insightful features, guidance and support to aid you in your studies, at work and as you develop your career.

Just like that, another academic year draws to a close for students and for those of you preparing to graduate, we have an extremely handy guide to writing and structuring your CV from recruitment experts, ArchJobs, for any and all jobs you will be applying for in the not too distant future.

It's also time to start thinking about upgrading your student membership with CIAT. The Institute is here to support you further with your career and professional development as an Architectural Technology professional after you graduate.

We hear from Lucy Mannion, a Graduate Architectural Technologist currently employed at Hollis, who tells us about her early professional career after graduation and Elliot Dickson MCIAT discusses his recent route to becoming a Chartered Architectural Technologist in a really insightful piece on page 24.

This just leaves me to wish you all the best in your final exams, coursework and projects! If you're left wondering how to fill your time once you're finished, why not think about entering the **AT Awards 2023** to have your work recognised by AT professionals and celebrated for its excellence in Architectural Technology? More information can be found at [architecturaltechnology.com/atawards](https://architecturaltechnology.com/atawards)

April McKay  
Editor

Get in touch if you have any  
feedback, ideas or content for  
the next issue.

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# aspirATIOn

The network supporting  
and developing aspiring professionals.

You may often think about what your career as an Architectural Technology professional or Chartered Architectural Technologist will be like, but perhaps you are unsure where to start.

It is never too early to start networking and being affiliated and engaged with certain organisations as this may be fruitful later in your career; either because you know who to contact or perhaps to find your next role. This is why CIAT is committed to helping you get started through our aspirATIOn initiative.

## What is aspirATIOn?

aspirATIOn is a forward thinking and inclusive global community of CIAT members and affiliates, made up of students, graduates, Associates, affiliates and recently qualified Chartered Architectural Technologists. The initiative was established both to support aspiring professionals as well as to help shape the future of the profession.

aspirATIOn operates at Region/Centre level led by an aspirATIOn Chair who has convened a local aspirATIOn Group. aspirATIOn currently exists/operates in the following areas, though it is growing as Architectural Technology becomes more widely recognised:

- 01 Northern Region
- 02 Yorkshire Region
- 03 North West Region
- 04 East Midlands Region
- 05 West Midlands Region
- 06 Wessex Region
- 07 East Anglia Region
- 08 Central Region
- 09 Greater London Region
- 10 South East Region
- 11 Channel Islands Region
- 12 Western Region
- 13 Scotland West Region
- 14 Scotland East Region
- 15 Northern Ireland Region
- 16 Wales Region
- C2 Republic of Ireland Centre
- C5 Asia Centre (India)
- C6 Europe Centre (Denmark)
- C7 Middle East and Africa Centre (Dubai)



The Chairs of all Regions/Centres in turn form the aspirATIOn Committee which is currently overseen by William Holland MCIAT and Joe Hyett ACIAT. Both William and Joe have previously been aspirATIOn Group Chairs in their respective Regions and part of their remit as Committee Chairs is to provide guidance and a framework for the Group Chairs to follow. This is supported administratively by CIAT staff. The aspirATIOn Committee meets at least once a year to network and share good practice.

Local aspirATIOn Groups will typically meet more frequently as they hold different events and outreach activities and are encouraged to work with the following groups to organise events which can include socials, CPD events or site visits:

- Region/Centre Committees
- CIAT Accredited Programmes
- Colleges and schools
- Peer groups such as
  - neighbouring aspirATIOn Groups
  - members of BRE Academy
  - CIOB Novus
  - RICS Matrics
  - local industry professionals

## Why get involved?

Being part of aspirATIOn will provide you with support whether you are studying, a recent graduate, an early career practitioner or have recently become a Chartered Architectural Technologist. There will be other members or affiliates that are going through the same thing or perhaps are a little further into their career, meaning they can share valuable tips from their own recent experiences.

Some of our former aspirATIOn Chairs have gained employment through their involvement and networking events. Similarly, several former Chairs have been appointed to other roles within the Institute such as Regional Chairs, Councillors or as Trustees on the Institute's Executive Board, for example.

## How to get involved?

We will advertise vacancies for the role of Chair via the Accredited Programme leaders, email and *AT Weekly*. Should any Chairs ask us to promote other roles they have within their aspirATIOn Committee, we will circulate them via the above means as well.

If you would like to be put in contact with your local aspirATIOn Chair, please email [education@ciat.global](mailto:education@ciat.global). Similarly, if you have any feedback or suggestions on aspirATIOn, we would be pleased to hear them. ■



aspirATIOn Group Chairs and Committee Members celebrating at the AT Awards 2022 in Shoreditch, London



# Life as a Graduate Architectural Technology professional at Hollis

Words by Lucy Mannion, Graduate Architectural Technologist, Hollis

After graduating from Birmingham City University with a First Class Honours in Architectural Technology in 2020, I secured a graduate position at real estate consultancy Hollis in April 2021. Having gained valuable experience in the surveying industry from a work placement during my studies, I knew this was the role I wanted to pursue after graduation.



### Come to work with me

Working at Hollis over the past two years, I've had the opportunity to work on a variety of projects involving 3D point cloud data, CAD and software that supports BIM. I've also worked across all stages of the measured survey process:

1. Preparing and checking fee quotes, liaising with subcontractors, and communicating with clients to answer any comments and queries they may have.
2. Gaining experience working on site, using a variety of equipment from Leica laser scanners to a disto with a tablet.
3. Processing survey data using Cyclone Register 360 software.
4. Drawing and modelling the deliverables from point cloud data in AutoCAD and Revit software.
5. Performing quality assurance (QA) checks to both 2D drawings and 3D models.
6. Issuing the final deliverables to the client and ensuring they are happy with the service we have provided.

### What have I been up to?

Recently, we have seen a market increase in demand and

levels of detail and information. A recent project I have been involved with was providing an as-built Revit model of a university building in London. The existing building was undergoing refurbishment, therefore a Revit model was required to understand the current space and layout so the client could develop their design. The model we produced was a mix of level of detail (LOD) 3 and 4, allowing us to provide more detail to certain elements and in the areas where necessary.

I was responsible for providing the estimated time required to complete the modelling works using knowledge and experience from other projects, in order to deliver an accurate quote. Additionally, my duties included setting up the Revit model in Ordnance Survey (OS) grid, modelling the externals of the building, and coordinating with the modelling team to assign their responsibilities.

Another example of a Revit project I completed was a Central London retail unit with office space above. This model was produced to our standard level of detail (LOD3) and my duties were to quality check the completed building model against the point cloud data we collected on site. As the property is a historic building, there were many detailed elements that required additional attention to detail to ensure overall accuracy of the model.

I was also responsible for managing documentation and the different versions at each stage of the process, keeping track of any revisions that were subsequently made. Once the modelling was complete, I modified and exported the floor plan views into AutoCAD, enabling the area referencing team to undertake their calculations in line with RICS and IPMS standards.

### Continuing to grow

Joining Hollis as a graduate has allowed me to work with many of the different service teams we have, from the M&E team to the project management team. This has enabled me to gain more experience and a deeper practical understanding of the industry across a range of sectors. Alongside providing access to a range of services and sectors, Hollis has encouraged my personal and professional development through offering CPD sessions and mentoring. This has truly helped to build both my knowledge and confidence in the field.



Using a Leica RTC360 laser scanner

Hollis is a social company to work for, hosting monthly payday drinks and quarterly lunches, alongside providing opportunities to attend Women in Property networking events. A recent highlight for me was HollisFest, a teambuilding day for the whole company, which took place in June 2022. The day provided the chance to network with those across all offices and departments, catch up with colleagues and have lots of fun together; a true demonstration of the 'One Team' culture we have at Hollis.

In the future, I look forward to progressing my career by managing more projects at Hollis and working towards becoming a Chartered Architectural Technologist with the support of my colleagues. It has been an exciting start to my career, and I look forward to what is to come! ■



Point cloud data of a Central London retail project



A Revit model of Lucy's university project



# Meet the Technologists

We want to give students a clear sense of identity amongst other professions & a vision of the direction towards which they are headed in their own careers

L-R: Stacey Hahn, Lecturer in Architecture and Construction Technology, UWE Bristol; David Noble, Joint Programme and Studio Module Leader ATD, UWE Bristol; Joe Hyett ACIAT, aspirATion Vice-Chair; Adam Green ACIAT, Amy Starr ACIAT; and Lloyd Gordon MCIAT

Words by CIAT Wessex Region

**Meet the Technologists is a series of events organised by the CIAT Wessex Region for students to learn about the career of an Architectural Technology professional by hearing from those now doing the job! The aim is to encourage success at university and provide the motivation to go on to become Chartered Architectural Technologists.**

Giles Boon FCIAT, Senior Lecturer at UWE Bristol and CIAT Wessex Regional Education Officer, explains how the *Meet the Technologists* events first came about:

"We were hearing of Architectural Technology students who were unsure what they wanted to do when they left university, and often expressing confusion over what distinguishes their profession over others. Our Regional Committee saw this as an opportunity to give insight and context to students studying on degree programmes Accredited by CIAT.

*Meet the Technologists* is a studio-based event series where Fellow, Chartered or Associate members as well as affiliates of CIAT are invited to give an informal discussion around the journey of their career, with a particular focus on how they qualified (or are in the process of qualifying) as a Chartered Architectural Technologist. We wanted to give our students a clear sense of identity amongst other professions and a vision of the direction towards which they are headed in their own careers. It's early days since our first session in February

2022, but we hope that more tangible benefits will include improved graduate outcomes and higher CIAT registration conversion rates for the Wessex Region."

At the latest *Meet the Technologists* event at UWE Bristol in March 2023, graduates from the university's Architectural Technology and Design programme came back to share their experiences; reflecting on their time as students and their careers to date. Current students heard how the speakers came to choose Architectural Technology as a profession, and gained insight into the variety of projects and style of practice the industry has to offer. Following the talks, the speakers spent time with students in studio to go through their design work as they progressed towards their portfolio submissions.

The first speaker, Lloyd Gordon MCIAT, started working in the built environment sector as a bricklayer 38 years ago, constructing houses, apartments and commercial buildings, including two years in Germany:

"In 2014 I enrolled to UWE to study Architectural Technology and Design where, alongside gaining many valuable skills, I learnt how to present in 2D, 3D and 3D VR renders. I graduated in 2017 and subsequently commenced my own architectural practice House of Designs by Lloyd. In 2021, I qualified as a Chartered Architectural Technologist. I have gained so much from being a Chartered AT; it's a privilege for me to share and communicate my professional experience with the students."

Amy Starr ACIAT came to UWE as a mature student in 2018, went on placement after her second year and graduated in 2022:

"I am now based at an architectural practice in Bath which specialises in high-quality restoration and alteration of heritage buildings and new-build projects. To give an indication of the range of AT work, I started my talk by running through my involvement in two contrasting schemes – the remodelling of a Grade II listed farmhouse and a new build residence using modern methods of construction (MMC). I then looked back at my time at UWE, offering some tips from my experience as a student and how to find placements and jobs. I finished with a reminder of how the degree is just the start of the route to Chartered Architectural Technologist status, to reassure any students feeling unclear about the expectations of a graduate and the level of support they should receive in the workplace as they start their careers."

After UWE, Adam Green ACIAT soon found a role at ECE Westworks in Bristol where he applies his technological and BIM capabilities to large residential and commercial projects:

"Having graduated in 2022 with the Gold Student Representative and the CIAT aspirATion award, I was delighted to be invited back to talk to current second and third year students. The opportunity to assist with design studio and provide some much needed motivation meant a lot to me. My talk focused on the transparency of my journey and encouragement to get across the finish line. This was well received and I was told it was 'extremely helpful' due to the relatability, given their current situation is comparable to when I was in their shoes a year ago. It was priceless to know they came away from the talk feeling ready to take it up a gear with a better understanding of what the finish looks like."

Feedback has been positive with final year student, Charlie Grazebook claiming, "it was great to see the variety of work available to us once we graduate." Ryan Hood found the event to be, "an interesting learning opportunity with insightful experiences from AT professionals." Amber Fullalove believes "the talks were very insightful and I found it inspiring to see how far my previous peers have come from their graduation." Ambrosias Lipinge added, "The talks left me with inspiration and motivation to continue working towards my goal."

We hope the *Meet the Technologists* concept could be expanded to other educational establishments, to see more students going on to make a positive start to their careers and becoming Chartered Architectural Technologists. ■



# Greater London Regional Student Awards

Words by Niall Healy MCIAT, Greater London Region Education Officer

What better way to spend a dark January evening but in good company to celebrate the hard work of the talented Architectural Technology students from the five London universities delivering CIAT Accredited degree programmes.

On Thursday 26 January, the Design Centre of EH Smith in Clerkenwell, London hosted the Greater London Regional Student Awards for the 'Class of 2022'. The assembled audience had the privilege of witnessing the future of the profession and Institute being presented with a prestigious accolade to their hard work, talent and academic achievement by the guest of honour, Kevin Crawford PCIAT.

It was also a privilege to have the opportunity to receive a presentation from Maria Gasparian, an architect and architectural ceramic artist, who has developed a beautiful body of work that elevates the humble brick to a work of art. Maria also very kindly created a special piece of work which was presented to each third year Highly Commended and third year Winning student from each of the five universities.

The awards event has evolved from a virtual event to what is now an important moment in the Greater London Region's social calendar. The Region is very fortunate to have London South Bank University, University of Westminster, Middlesex University, University of West London, and University of East London delivering Accredited Honours degree programmes. The hard work of the academic staff at the coal face of education delivery was clearly evident through the work of the students in their charge.

The spirit of this event is celebration with 20 of the 50 nominated students receiving specific recognition for their achievements. EH Smith was kind enough to provide the students the opportunity to exhibit examples of their work on the night.

The Regional Committee is indebted to the team at EH Smtih for their generosity and hospitality.

Now on to planning the awards event for the 'Class of 2023'!

Stay tuned to the Greater London Region's social media channels for announcements of up-and-coming events. GLR is where it is AT! ■

Follow us on:

Twitter: @CIAT\_London

Instagram: @ciat.london

Facebook: CIATGreaterLondonRegion



Students and staff from University of East London with Kevin Crawford PCIAT



## Citation for Trishan Mepani

*Trishan was an exemplar student. He belonged to the cohort that was hit by the pandemic in his first year and experienced second year entirely online. His positive attitude towards his learning and eagerness to learn and progress makes him a great team player. The academic staff are delighted to recognise Trishan and his efforts through this prestigious award.*

## Citation for Gus Hodge

*Gus studied the AT programme at Westminster part-time, whilst juggling his full-time role - no mean feat! He was always a solid character in the studio - reliable, consistent, generous and respected. His industry knowledge and experience meant a strong foothold in reality. We therefore encouraged Gus to push himself creatively; his final year project is a magnificent culmination of that creativity and technical brilliance. We have no doubt he is bound for great things!*

## Citations given by tutors for third year winning students



## Citation for Abu Hurayrah

*Abu has an excellent work ethic and takes great pride in the presentation of his work. The academic staff are delighted that his achievement can be recognised by this very special award and are confident that he has laid the foundation for a very successful career ahead.*



## Citation for Mariam Amiranashvili

*Mariam showed incredible progress throughout her degree, always improving her design and detailing skills. She excelled in her final year project, producing a sensitive and well thought design for a mixed-use building. Her attention to detail and will to learn are great attributes that will be appreciated by employers.*



## Citation for Danny Tran

*Danny has been a hard working student, consistently achieving high grades. His work has been outstanding in every area of study. The resilience and tenacity he displayed to complete an excellently considered architectural scheme with an elegant technical resolution to his final project deserves special mention.*

# An afternoon to remember

Words by Sam Lambert ACIAT, Architectural Technologist, P+HS Architects

Roughly six months ago, things took a sudden change of pace! 21 October 2022 marked the annual AT Awards event, the premier accolades recognising and demonstrating outstanding achievements in Architectural Technology globally. Never before in my professional career had I been surrounded by so many passionate and like-minded individuals who play a pivotal role in shaping the future of Architectural Technology and the built environment.

Some of these individuals were nominees for the Awards, one of which I was shortlisted for.

It's fair to say that my nerves were pumping and my heart rate was through the roof. I not only wanted to do myself and P+HS Architects - my employers - proud, but also my family who made the 500 mile round trip to London all the way from the family farm in Coverdale, North Yorkshire.

The clock struck 15:00 and the room dimmed followed by a well-executed introduction from President Kevin Crawford PCIAT and TV presenter Matt Allwright. The atmosphere of the room flipped on its edge with a sense of nervous and uptight ambience. The time came for the Emerging Talent in the Technology of Architecture Award. Again, like every Award before, the room fell tense; eager eyed individuals including myself were engaged at the big screens, which had been displaying the names of the respective nominees up for Awards. Fingers crossed, sweating and heart pumping, I stood there. Matt Allwright's voice echoed across the room: "And the winner...for the Emerging Talent in the Technology of Architecture 2022 is...Sam Lambert!"

Within that moment and in those few seconds, I had never felt such a burst of emotion. I felt the weight of the room on my shoulders as the crowd cheered and congratulated me, with people patting me on the back and shaking my hand as I walked to centre stage. Shaking Matt and Kevin's hands, posing for my photo, I saw my Mum and Dad and Grandad sat in amazement, faces filled with joy as they watched their son and grandson receive such a coveted Award. The afternoon

ended how it started, clinking of drinks, networking and socialising. It was certainly one to remember.

The recognition I have received since winning the Award has been immense. It has boosted my confidence as a young professional and enhanced my reputation. Not only this, I feel more engaged with the profession and have a higher sense of intrinsic motivation which has encouraged me to take on every opportunity that comes my way.

One recent opportunity following the AT Awards was being invited to become Chair for the aspirATIOn Group for the Yorkshire Region. As Chair, I look forward to developing a community of talented and ambitious professionals within AT, a community that supports one another, inspires the next generation, and has a voice in the future of Architectural Technology and its pivotal role within the built environment.

Receiving the Award felt like justification for the agony, the self-doubt and feeling of defeat, partnered with the hard work that went into the early years of my career. However, it would be selfish of me to think that the Award was justification for myself. It is also a true testimony to every individual who had to study and emerge as an AT professional through the hardships and unpredictable times of the COVID-19 pandemic. It proved to be a hard time for everyone, but especially for apprentices like myself who were cut off from the one-to-one project related tutoring and mentoring we were receiving. This meant we had to work independently through our apprenticeship studies and motivate ourselves to commit a sterling job at any task.



Sam with his prizes after winning Emerging Talent in the Technology of Architecture Award at the AT Awards 2022



Kings College London outpatients building

Ultimately, this made us more adaptable and is why I feel the Emerging Talent Award is more than just a personal award; it's a true testimony to each and every individual who completed their studies and pursued their new careers through the pandemic.

Since the AT Awards, I have continued in my role as an Architectural Technologist at P+HS Architects where, in the last six months, I have worked on a range of specialised projects. One of these projects is the Kings College London Modernising Medicine Scheme. The busy teaching hospital serves 700,000 people across four London Boroughs and required a new state of the art outpatients building. The £21 million project is a 4-storey healthcare building constructed from 132 steel-framed modules. I have been assisting with the project delivery from stage 4 upwards to its recent site completion.

Finally, it wouldn't be right not to thank everyone who has supported me along the way in my early career; I want to give a very special thank you to Adrian Evans MCIAT, Stephen Hatcher MCIAT, Steve Jordison MCIAT and Pete Stead FCiAT who were my mentors, and without their committed time and patience, I would not be in the position that I am in today. ■





# AT Awards 2023 open for entries

The AT Awards are open for submissions and nominations for the following Awards:

- Excellence in Architectural Technology - closes 19 June
- Student Awards for Excellence in Architectural Technology - closes 24 July
- Emerging Talent in Technology of Architecture - closes 10 July
- The Chartered Architectural Technologist of the Year - closes 10 July
- Gold Award - closes 3 July



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# How to write and structure your CV

Words by Aylin Round, Founder, ArchJobs

**A good CV is a keystone for any job search. It is the first thing employers and recruiters will see when they look at your application. But how does your CV stand out from the crowd? Do you need to use keywords? What is the best CV format? How does an ATS (Applicant Tracking System) impact your application? What does not belong on your CV? Don't worry, I will answer some of the most frequently asked questions and will show you how to structure your CV.**

## What does CV stand for?

A CV is a short written description of your education, qualifications, previous jobs, and sometimes also your personal interests, that you send to an employer when you are trying to get a job – Source: Cambridge Dictionary

## General CV formatting tips

File type: PDF

File size: Max 5MB

Font type: Easy to read fonts are Arial, Times New Roman or Calibri

Font size: 9-10

Pages: Ideally 1-2

Naming your file: First and last name - CV (i.e. Jane Doe - CV)

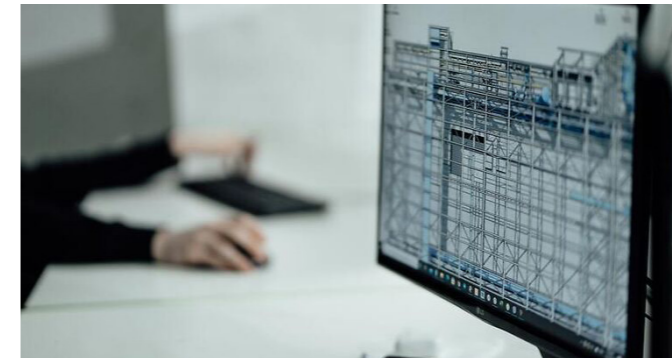
## Basic structure of your CV

After looking through thousands of CVs in my time, I've noticed one particular CV structure which seems to be liked by most hiring managers. A rough outline is as follows:

1. Full name, current job title, professional designations (MCIAT, ACIAT, CIAT student member etc.)
2. Personal details
3. About me/Profile section (quick snapshot of who you are, your level of experience, education and what you are after)
4. Education/Awards
5. Soft-skills section - for example, job running, presentation, leadership, design, and team player (only list the most relevant skills)
6. Software & tools section - for example, Revit, Autocad, Vectorworks, Photoshop, Indesign, Sketchup
7. Working history - begin with your most recent experience (this is very important)
  - 7.1 Job title, Company name, Location, Dates (start-finish)
  - 7.2 Summarise your responsibilities and transferable skills (if applicable), and mention any work highlights - I worked on a new build mixed-use scheme - supported the team with producing tender packages, attended site meetings and dealt with the planning applications.
8. Hobbies (optional but could be a nice ice breaker)
9. References - available upon request

1	<b>John Doe</b> Part I Architectural Assistant BA (Hons) Architecture	
2	07789444444 hello@aylinround.com Manchester Full drivers licence	I am a dedicated and motivated Part I Architectural Assistant who recently graduated from The University of Manchester. I would like to find a practice where I can use my design and technical skills and keep learning from team members. I have a keen interest in working on higher education and mixed-use schemes and enjoy the challenge each project brings.
4	<b>EDUCATION</b> BA (Hons) Architecture The University of Manchester   2019 - 2022 <b>A-Levels</b> King David School Manchester   2017	<b>WORK EXPERIENCE</b> <b>Internship</b> Architects Studio in Manchester   Feb - May 2022 <ul style="list-style-type: none"> <li>• I joined a 15-strong architectural practice that focuses on large-scale Higher Education, Mixed-Use and Residential schemes</li> <li>• Projects I supported are Stage 3 Higher Education scheme in Manchester (value £1m) and a Stage 3/4 Mixed-Use Commercial/Residential scheme in Preston</li> <li>• I helped produce planning applications and technical packages and attended design meetings</li> <li>• I was able to strengthen my Revit and Photoshop skills</li> <li>• I learned the importance of building strong relationships between the client, stakeholders and contractors</li> <li>• collaborated with the team and discussed possible issues and how we can resolve them</li> </ul>
5	<b>SOFT SKILLS</b> <ul style="list-style-type: none"> <li>• communicator &amp; problem solver</li> <li>• team player</li> <li>• organised</li> <li>• creative</li> <li>• attention to detail</li> <li>• adaptability</li> </ul>	<b>Volunteer</b> The University of Manchester   April 2019 - April 2021 <ul style="list-style-type: none"> <li>• I was part of the Social Club and helped organise monthly events</li> <li>• It helped me to improve my organisation, communication and problem-solving skills</li> </ul>
6	<b>SOFTWARE SKILLS</b> <ul style="list-style-type: none"> <li>• Revit</li> <li>• Autocad</li> <li>• Photoshop</li> <li>• Indesign</li> <li>• Sketchup</li> <li>• Microsoft Team &amp; Zoom</li> </ul>	
8	<b>HOBBIES</b> <ul style="list-style-type: none"> <li>• Photography</li> <li>• Live drawing</li> <li>• Running (finished my first marathon in 2021)</li> <li>• travelling</li> </ul>	
9	<b>REFERENCES</b> Available on request	

An example CV template made with Canva - a great tool to create a nice looking CV for free



For your CV to stand out, it needs to be well written, free of errors, well structured and relevant for the position you are applying for

## Let's get started

Most people would just start listing out their previous jobs and experience, however I'd recommend before you write anything, start by looking for some suitable job openings - try ArchJobs, ATJobs, Indeed or LinkedIn.

Once you find a few interesting job postings, read through them and look for commonly used keywords - do they mention any specific software (Revit, Vectorworks, AutoCAD), leadership skills, design skills, years of experience, level of degree, problem-solving skills, business development and communication skills? Highlight all relevant keywords as you will need to incorporate them in your CV.

The more you tailor your CV to the job brief, the higher the chance someone will contact you.

## How do I make my CV stand out?

For your CV to stand out, it needs to be well written, free of errors, well structured, and relevant for the position you are applying for. There are some useful websites where you can use free CV templates. One page I used to recommend to candidates is Canva.com. It is easy to use and you can choose from different CV templates.

## How long should a CV be?

Ideally, your CV should fit on one page - A4. However, I appreciate that some of you have worked for multiple companies and gained relevant experience. In that case, try and keep it down to a maximum of two pages. Don't be afraid to cut out experience that isn't relevant or was too long ago, but don't leave gaps.

## Do I need a cover letter?

It depends on the position and company. Usually, the company will specify in the job description if they want a cover letter or not.

## Should I tailor my CV/cover letter whenever I apply for a new job?

Yes, I would highly recommend spending that extra time amending your CV/cover letter. Hiring managers can tell if a CV/cover letter has been tailored to a specific job or not.

Don't forget, first impressions count and you only have their attention for a short time. Make every application count - more time spent on tailoring your applications will reduce your job search time massively.

## How does an Applicant Tracking System (ATS) impact my application?

Most recruitment agencies and mid to large size companies use ATS systems which lets them store, filter, organise, and track applications but also search their database for suitable candidates by entering relevant keywords (skills, location, job titles etc.)

It's important to understand that when submitting your application via an ATS, you're sending it to software and not an actual person. Therefore, your CV needs to be ATS-friendly and optimised to ensure that it passes the initial screening and makes it to a human receiver.

## What keywords should I use?

Whether you're sending your application directly or uploading your details via a company's recruitment portal, using relevant keywords will help your application stand out. Below are the most commonly used keywords for any architectural positions:

*Presentation skills, technical skills, design skills, concept design, planning applications, site visits, coordination, liaising with clients, UK Building Regulations, communication skills, Revit, Autocad, Photoshop, Sketchup, InDesign etc.*

## Do recruiters and hiring managers read every single word?

No chance. They will look for job titles, keywords, companies you worked for, length of employment and skill sets. That is why a well-structured CV that catches their eye by reflecting keywords from the job description is so important - this is what they are scanning for. Once you have their attention, they will look at your CV in more detail.

## Do I need to list all my previous jobs on my CV?

No. That usually applies to candidates with more than 15-20 years of experience. For example, if you are applying for a Senior Architectural Technologist role, would it be necessary to mention that you worked part-time as a Barrister back in the 90s? The short answer is no. The hiring manager is more interested in your recent experience.

## Do I need to add a picture of myself?

No and I would advise against it. There is a law in the UK, Republic of Ireland and the United States which protects job seekers from being discriminated against. That being said, people might have unconscious biases and you don't want to give anyone a reason to dismiss you before even getting to interview.

"It is against the law to treat someone less favourably than someone else because of a personal characteristic such as religion, sex, gender reassignment or age." - Source: Gov.uk

#### Should I add any hobbies?

Yes, you can add hobbies but this is optional. If you decide to add some hobbies, keep it short and sweet. Maybe you and the hiring manager have something in common and it could break the ice and make you more memorable.

#### Here are a few things you should avoid:

##### Too much personal information

Please don't share too much personal information like your marital status, religion, nationality, address, number of children, full date of birth and passport details.

##### Do not lie about non-existing skills or accomplishments

Yes, you might get invited to an interview, but they will question you about your skills and experience. You don't want to be called out by hiring managers as they won't give you another chance. Be honest and upfront, say that you're looking to gain more experience in X and you're already doing some additional courses. Lying will only waste both your time and the hiring manager's time.

##### Don't provide a list of your references

There is no reason why you should enclose your referee's full contact details i.e. name, phone and email address. Just write, "Available on request" and wait until asked to provide some contact details.

##### Don't mention your current salary or salary expectations

If you disclose your salary or expectations, it could negatively impact you in three ways:

- Your salary expectations are too high
- Your salary expectations are too low
- You might have eliminated your chance to negotiate a higher salary

If your salary expectations are too high and the hiring manager/recruiter is aware that their budget won't stretch that far, they would not contact you.

If your salary expectations are too low, they will wonder why. They might think you lack knowledge or don't value your experience/skill set.

And number three - they already know your minimum number. Let's say you wrote that you would accept £40k - the employer would not offer you more than £40k as you took your negotiation abilities away.

##### My final words of advice

Do your research and tailor your CV and cover letter before applying - nobody wants to send out dozens of unsuccessful CVs. If you are really struggling, feel free to contact me on LinkedIn and I'd be happy to offer some advice. However, if you are working with an agency recruiter, you should ask them for advice first as it's in their interest for you to have a good CV. ■

*Aylin Round is the founder of ArchJobs. She has nearly three years of experience as a senior recruitment consultant specialising in architectural recruitment across the north of the UK.*



# State of play

Words by Paul Chappell, Director, 9B Careers

## The architectural jobs market has gone through a lot of changes in the last few years, with the impact of the pandemic and Brexit greatly affecting the demand and supply of talent.

One of the most notable developments was the strong rebound that occurred after the initial lockdowns in 2020. According to the *RIBA Future Trends Survey*, the workload index rose from -82 in April 2020 to +31 in June 2021, indicating a positive outlook for future work. Compared to previous recessions, however, where there would usually be a ready workforce to take up the new opportunities, firms found it surprisingly hard to find suitably qualified staff. Sadly, following Brexit, the UK no longer held the same appeal for the many European architectural staff who decided to leave during the pandemic.

At the same time, inflation started rising rapidly in 2022 and in order to attract the best talent, architectural salaries also had to rise. According to our last salary survey, the average salary of Architectural Technicians and Architectural Technologists increased by around 12% compared to 2021. Firms were also very flexible towards remote working and job seekers could be a lot more demanding in their negotiations.

Although workloads and salaries were increasing last year, architectural fees were not. Too often it appears architectural practices have undercut their competitors to levels which in the long run are not sustainable and when projects inevitably get put on hold, the finances don't stack up. This may in part be due to the increase in new practices that have set up over the last few years who initially have low operating costs and feel they can offer clients lower fees. For more established businesses, their greatest frustrations appear to be the stop-start nature of projects and 2023 has seen a number stall. Many will restart but practices will have to gamble on how long they can hold onto staff whilst waiting for projects to proceed to the next stage. With building costs rising far in excess of inflation during the last year, however, the profitability of many projects have been put in jeopardy. The biggest casualty has been HS2 that will now inevitably result in a large number of redundancies.

The balance between vacant jobs and job seekers has therefore started to shift and the candidate driven market of the last couple of years is coming to an end. With an increase in architectural staff looking for work, firms are now far more reluctant to offer such high salaries and are also being a lot more demanding about returning to pre-

pandemic work practises. Although there are still firms offering flexible working, there is an obvious push to get staff back to the office where employers generally feel team working is more productive.

The recent increase in architectural CVs is very sector specific and some areas are still very busy and seeing a shortage of qualified staff. The majority of candidates we are receiving have lots of experience within large scale infrastructure or developer housing projects which have been impacted by rising interest rates. Most of our job opportunities though are working on high-end private residential across the southeast where, post-Christmas, the effects of the mini budget have stabilised. The luxury end of the market is particularly buoyant and still struggling to resource projects with people who have specialised sector experience. The smaller residential studios will also often be using Vectorworks whereas staff coming from larger practices will probably prefer to use Revit.

With the cost of living crisis biting and the recent salary increases waning, many people are looking to make the move client side or to a contractor where the overall package is often a significant jump from working within an architectural practice. These roles tend to be working as Design Managers, Technical Coordinators and Project Managers. Unfortunately, the number of vacancies within this sector is far smaller and therefore competition is significantly higher. They will invariably also be looking for people who have already gained 5-10 years' experience within practice.

The other popular move has been into the public sector which, although often has slightly lower salaries, does tend to offer a better work/life balance and pensions. However, with impending government cuts, this option may become more limited. With the rising tax burden in the UK, the final option many consider is to work abroad where often it can be far more lucrative. Projects like The Line in Saudi Arabia will be a popular draw for some, but the obvious moral issues will not be for everyone.

Although some of the above may sound quite challenging, compared to the last few years of Brexit and the pandemic, the architectural industry has been through a lot worse and there is definitely light at the end of the tunnel. ■

# Upgrading your student membership

Words by James Banks, Membership Director

If you are nearing the end of your studies, we would like to take the opportunity to wish you all the best and good luck, especially in these challenging times!

We are also here to support you in furthering your career and professional development after you graduate and begin the next part of your journey as an Architectural Technology professional.

CIAT has collaborated with recruiter Hays to create an **employability guide here** which provides helpful tips and information regarding creating your CV and developing your portfolio, how best to apply for jobs and prepare for interviews, as well as advice on being offered the job and building a successful career. In addition to this, the Institute has its own jobs board - **AT|jobs** - and there are other recruitment agencies which can advise and support you.

## Next steps

Once you have graduated, we invite you to take your involvement with CIAT to the next level and upgrade to either Associate, ACIAT or affiliate status. Upgrading with CIAT will demonstrate to potential/future employers your commitment to your career progression.

Should you upgrade in the same year as programme completion, we offer a supportive two-year staggered subscription.

The 2023/24 rates are:

Year 1  
**£155 (instead of standard rate £315)**

Year 2  
**20% off standard full subscription rate**

To take advantage of this, you can upgrade online at [architecturaltechnology.com/membership/join.html](https://architecturaltechnology.com/membership/join.html)

A suite of films about the qualifying process can be viewed on our YouTube Channel at [youtube.com/CIATechnologist](https://youtube.com/CIATechnologist)

For any queries related to upgrading, registration or qualifying, please do not hesitate to contact [membership@ciat.global](mailto:membership@ciat.global)

## 4 reasons to upgrade

### Accountability



Demonstrate your commitment to the highest professional and ethical standards in Architectural Technology.

### Support



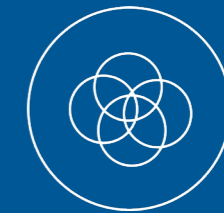
Dedicated support with professional progression and a range of information and resources.

### Development



Attend CPD events through our AT CPD Register and receive specialist support via MentorMatchMe and Technology Network.

### Networking



Engage with your peers and fellow professionals. Make new contacts, exchange ideas and expand your professional and social networks.

Upgrade online at  
[architecturaltechnology.com/membership/join.html](https://architecturaltechnology.com/membership/join.html)  
and use code **SA23** to receive your staggered subscription rate

# Becoming a Chartered Architectural Technologist

Words by Elliot Dickson MCIAT, Chartered Architectural Technologist, Sanderson Borland

**Elliot is a Chartered Architectural Technologist at Sanderson Borland, a practice with studios in Edinburgh, Glasgow and Manchester. Elliot is currently based at the Edinburgh studio having worked as Project Lead and Contract Administrator on multiple projects across the UK. Here, he discusses his route to Chartered Architectural Technologist status.**



## SANDERSON BORLAND

### Why did I choose to study Architectural Technology and how did I do it?

During my time at school I had always been drawn to the graphics and woodwork department, with an interest in physics and maths also. So, my first thought was, "I'll become an architect!", with no idea Architectural Technology was a career option! But after looking into the different courses on offer at universities and what modules were covered, I was more drawn to Architectural Technology.

I was then fortunate to gain a place at Robert Gordon University (RGU). Selecting RGU was almost a no brainer for me, as it was a CIAT Accredited degree programme with high graduate employment stats.

The programme appealed more to me due to its focus on the building sciences/technology aspects whilst also getting to use my eagerness to design.

During my time at university, we were led by Dr Jonathan Scott FCIAT, Programme Leader. Dr Scott was a great mentor in my early career, always pushing the boundaries of what I thought was possible in my ability and understanding of construction.

Whilst at RGU I learned how to navigate the crazy design choice you make as a bright-eyed student and how to make it technically feasible. One example of this was a supermarket project I designed to have a farmable roof and to be sunk into the existing ground. Somehow, I think your usual high street supermarket wouldn't have the budget I was working to...but never say never and aim for gold!

After my four years at RGU, I graduated with a first class Honours in BSc Architectural Technology, far exceeding my own expectations coming into the course. However, I think that's more on me doubting my ability to obtain a high grade, given my history with high school.

### How did I break into the built environment sector?

I secured my first job straight out of university through sending emails with a covering letter and portfolio to every architectural firm I could find. I must have applied to around 10-20 firms in one week for about two months in hope of getting called for an interview. A while after that I was offered a role at a small to medium sized firm in Edinburgh where I

worked for five years on a national refurbishment scheme for one of the major UK-based banks. I'd worked on a few small domestic extensions and houses during my time there but felt it was the right moment in my career to move on, to where I am now – Sanderson Borland Architects. Since joining Sanderson Borland I have been a Project Lead and Contract Administrator for numerous projects, one being Lochford Gardens, Hallhill Dunbar.



Lochford Gardens, Hallhill Dunbar

### Why did I want to become a Chartered Architectural Technologist?

At RGU, Dr Scott was always informing us of the importance of being involved with CIAT at an early point in our career. During my fourth year, I became a Committee Member of Scotland East aspirATIOn. From this role, I had opportunities to speak with practitioners, lecturers, recent graduates and learn more about the profession outside of university. It was a vital part in showing me why CIAT is a great support to members and affiliates and why I should be aiming for Chartered Architectural Technologist status. I also wanted to prove to myself, my employer, colleagues and clients that I have the ability to provide them with a full, robust service and professionalism to meet their needs.

### What did it involve?

Starting the application for the MCIAT Professional Assessment (PA) seemed a daunting task. How was I going to pull together all the evidence? How would I find the time to write the application?

The process is broken into two stages; the MCIAT Professional Assessment, and upon a successful application you are invited to a Professional Interview. When it came down to it, it was a much easier task than I'd originally thought. The hard part was trying to collate all the evidence for the PA in a cohesive manner.

The first thing I did was read the Professional Standards Framework for Chartered Membership, examples of previously successful applications and the questions then being asked of me in the assessment. After that, I made notes on what projects I felt I could discuss for each section. From here, I wrote as much information as possible for each section and then edited it down to meet the required word

count. Throughout, I made notes for each item to what the referencing evidence would be and created a simple folder structure with a contents sheet. I had my colleague and mentor Matthew Gibson MCIAT check over my application to ensure it was as he would expect, before submitting to the CIAT Member Panel for approval.

Upon receiving approval by the Panel, I was invited to attend my Professional Interview via Zoom. This was a 45 minute conversation with CIAT Interview Assessors; it's a casual chat to ensure you are who you say you are and that you possess the professionalism and ability. That being said, this was the most nervous I've been attending any interview! Afterwards, the Assessors break away to deliberate whether or not you have been successful in passing the interview and in my case, I was! From here you are informed you have passed and will receive formal confirmation in the post with your certificate. Weight off the shoulders lifted!

### What are my aspirations for the future?

Now that I can call myself a Chartered Architectural Technologist, I'd

like to look more into business development and how a business can grow. I'm also Sanderson Borland's 'Social Media Manager' and I'm interested in how increasing our engagement can grow the company. Then one day, being director of a successful practice.

My other area of development I'd like to invest time in would be BIM and how it could improve the productivity of both my output and the company's – perhaps further training to obtain the likes of BIM Level 2 and BIM Management.

### What advice would I give to 'up and coming' graduates?

Get as much experience as you can in a variety of sectors. If you can find a practice that will expose you to all areas such as client meetings, planning, building control, site experience, that's great. The earlier you start getting these experiences, the better it will build your confidence and your understanding of the whole picture. The best of that list is getting site experience and talking to the people reading your drawings, finding out what works and what doesn't; create a rapport with the site team and this way, if they have a question, they will come to you straight away and not think, "I don't want to speak with them, they will get annoyed".

I had a great mentor in my first role, Ian Christie, who afforded me a lot of time and experience very quickly. He trusted me to do the job and if I didn't know the answer or got stuck, he was always approachable.

My final piece of advice is not to worry. You will make mistakes, no one expects you to know everything. If you make a mistake, own up to it and learn from it, and ask questions, even if you think it may sound silly. ■

# Triversity Collaboration Project: 2022

Words by Cathal Gahan, student member, South East Technological University | Waterford

Last year's Triversity project was a major success. The ninth workshop of its kind, 2022's edition was held this time around at ISEP Porto, Portugal. Triversity is a collaborative project with teams across many disciplines and countries, including students from Ireland, Denmark, Portugal, UK, and Poland.

Over 140 students were competing from South East Technological University (SETU), Copenhagen School of Design & Technology (KEA), Sheffield Hallam University (SHU), Instituto Superior de Engenharia de Porto (ISEP) and Wroclow University of Science and Technology (PWR). The students varied in what they were studying, with the majority from Architectural Technology and BIM, Quantity Surveying, Engineering, and Construction Management backgrounds.

The winning team members were: Alvaro Traconis, Daniel Downey, Francisco Alves, Jayde Coady, Iakovos Christodoulou, Martha Clarke, Neal Breneya, and me.

Triversity was a week-long project with students competing in person and remotely – I participated remotely from Ireland. With the use of Common Data Environments (CDE) and constant communication (via MS Teams), working remotely was a success. From the outset, project set up was key to this. The use of the ISO19650 series played a massive part and using the correct naming conventions alongside a structured way of working collaboratively and scheduled model version updates allowed for all team members to be kept in the loop with up-to-date information. This allowed every team member to know where they were going and what they were doing so that they could meet project goals.

The aspect of balance was also implemented with the students that travelled to Porto, experiencing some wonderful

sights the city had to offer, including a boat trip along the Duoro River and climbing the Arrabida Bridge arch. As well as seeing the local architecture, it gave students a feel of what they could produce over the course of the week.



Arrabida Bridge arch

From a learning point of view, Triversity plays a hugely beneficial role. For a final year student like myself, this project gave me a real life feel of what to expect on entering industry, working with other disciplines in a team environment, seeing their perspective and how teams come together using specific skill sets to reach a common goal and produce high quality work in a relatively short space of time.

I also found that working with other students from different courses gave me the opportunity to explore technology that I have not used before. In turn this created curiosity and since the project, I've tapped into using some of the skills that I picked up from the week and implemented them into my own projects.

Second and third year students noted that they gathered a lot of useful information and skills such as communication, technology and people skills, from peer-to-peer learning from the more senior students.

This is why I feel a collaborative project like Triversity is extremely beneficial because it takes students away from the classroom and supports development of key aspects that are needed when entering industry.

I would highly recommend Triversity to other universities as it brings a fresh approach to learning, challenges you in new ways, takes you out of your comfort zone and ultimately kicks you into gear for what awaits you once graduation approaches.

Finally, I would like to thank the lecturers involved across all universities for the chance to take part in an enjoyable and memorable week. ■

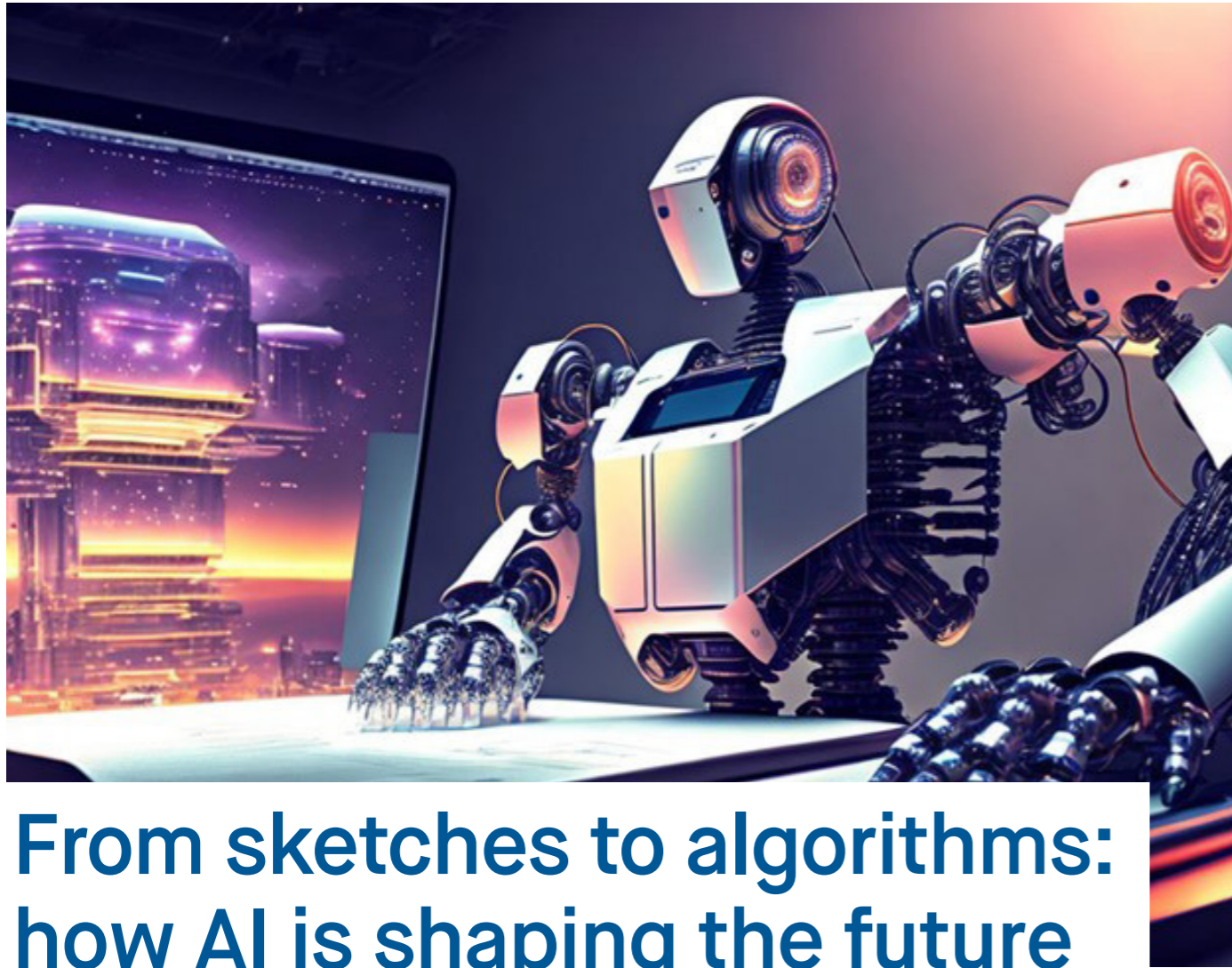


A rendered image of the team's conceptual design

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Students at the ISEP Porto, Portugal



# From sketches to algorithms: how AI is shaping the future of design

Words by Arushi Malhotra, Assistant Professor & Program Coordinator, School of Design & Architecture, Manipal Academy of Higher Education

Artificial intelligence (AI) is revolutionising every aspect of our lives, and design is no exception. With machine learning, generative design, and other AI-powered tools, claiming to create buildings that are smarter, more efficient and more sustainable than ever before, AI is shaking things up in the built environment. But what does this mean for the future and what do you need to know about working with these tools? Is AI our new design partner?

Artificial intelligence (AI) has been making waves across industries and design is no exception. AI technology is rapidly transforming the way professionals approach design, enabling them to explore new possibilities and create buildings that are more efficient, sustainable and comfortable for occupants.

From generative design to intelligent automation, there are numerous ways in which AI is shaking things up. Some of the most evident ones are:

#### Generative design

One of the most exciting developments in AI technology is generative design. Generative design uses AI algorithms to generate multiple design options based on input parameters. Architectural Technology professionals can set design goals such as structural stability, energy efficiency or aesthetics and the AI tool will create numerous options that meet those criteria. This allows you to explore a wider range of design options in less time, opening new possibilities for innovative building designs.

#### Optimisation of building performance

AI can be used to optimise building performance by analysing data such as energy usage, occupant behaviour and other environmental factors. This data can be used to inform design decisions and make buildings more efficient and comfortable for occupants. By integrating AI technology into the design process, AT professionals can create buildings that perform better and require less energy to maintain.

#### Intelligent automation

AI-powered automation tools are becoming increasingly popular in the field of design. These tools can automate tasks such as building code compliance checks, material selection and cost estimation. This not only saves time and resources but also improves the accuracy of these tasks. AI-powered automation can also help to identify potential problems before they arise, reducing the risk of errors and costly delays.

#### Improved collaboration

Collaboration is a crucial aspect of design, and AI-powered collaboration tools can help you work more efficiently with other stakeholders such as contractors and engineers. These tools can streamline communication, automate documentation and improve project outcomes. AI-powered collaboration tools can also help AT professionals share

Proponents of AI argue that technology can actually enhance creativity and help AT professionals explore new possibilities they may not have considered otherwise

design ideas and get feedback from other team members in real-time, facilitating a more collaborative and iterative design process.

#### Smarter design solutions

With the help of AI, AT professionals can now create smarter and more sustainable designs. By leveraging environmental data such as solar radiation, wind patterns and temperature, AI tools can analyse and suggest design changes that reduce environmental impact and improve energy efficiency. With the ability to meet sustainability goals and create buildings that are better for both the environment and occupants, AI is paving the way for a smarter, more sustainable future.

While the benefits of AI in design are evident, there are also concerns about the potential drawbacks. Some worry that AI tools may stifle creativity and produce formulaic designs. Others worry about the ethical implications of AI-powered automation, such as job displacement. However, proponents of AI argue that the technology can actually enhance creativity and help AT professionals explore new possibilities that they may not have considered otherwise.

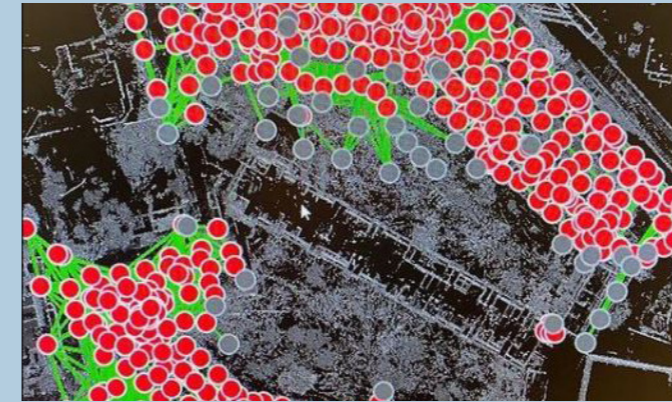
As AI technology continues to evolve, AT professionals will need to adapt their skills and learn how to work with these tools to stay competitive. While "Mr Algorithm" may not replace humans entirely, AI is likely to become an increasingly important tool in the design process. As AI technology continues to evolve, it will be exciting to see how AT professionals use these tools to push the boundaries of what is possible in design. ■

# Learning lessons from Grenfell



Words by Antonio Paya Camino ACIAT, BIM Co-ordinator, Spatial Dimensions

The Grenfell Tower fire in 2017 was a tragic event that claimed the lives of 72 people and left many more displaced. The disaster exposed issues with the safety and conformance of the estate. Understandably, residents called for change. They pressured the government and local authorities to take action and ensure that a similar event would never happen again. As a result, the estate is undergoing a regeneration project to transform it into a model social housing estate for the 21st century.



Spatial Dimensions specialise in providing accurate and comprehensive survey solutions for various projects, from small residential properties to more significant commercial developments.

The Lancaster West Estate project highlights Spatial Dimensions' commitment to delivering exceptional survey solutions regardless of size or complexity, whilst providing support and assistance with delicate humanitarian themes and sustainability challenges.

The Royal Borough of Kensington & Chelsea split the project into six lots. Architectural practices Karakusevic Carson, Penoyre & Prasad and ECD won the contracts, which saw 40 residents representing every block, helping to select the winning bidders. Residents were involved in choosing the design teams and ensured their voices were heard and their needs considered.

All six lots appointed the Spatial Dimensions team. Time was of the essence. The 17-acre estate required laser scanning and topographical and utility surveys. It was responsible for producing survey drawings and accurate 3D models. These deliverables assisted with the retrofit design, planning consents and creating tender packages for contractors.

The team surveyed the externals and common areas of all 700 homes across the site to conduct the laser scanning, including a large number of internal flats and houses that were vacant or occupied. The topographical and utility surveys were also a massive undertaking, with the estate spanning 17 acres.

The team gathered all data, post-processed it and created point clouds of the estate. The data helped the design team familiarise themselves with the layout and aid the redesign process.



Finally, the Spatial Dimensions team delivered a master BIM LOD300 Revit model of the six lots with mechanical, electrical, plumbing and structural information. All deliverables were within budget and on time, with regular review meetings with each architectural practice.

The project was challenging. The sensitive nature of the Grenfell Tower fire tragedy meant that the team had to work with stakeholders who were understandably emotional and concerned about the estate's future. There were also tight deadlines for the production of the survey results. These deadlines also added to the pressure on the team to deliver on time.

However, the project will have a significant positive impact on the local community. The estate's regeneration prioritises the buildings' safety and comfort. The new estate will provide a more sustainable and secure environment for its residents.

The Spatial Dimensions team played a crucial role in this project, conducting laser scanning and topographical surveys as well as delivering a master BIM LOD300 Revit model of the estate.

In conclusion, the Grenfell Tower fire in 2017 was a tragedy that exposed issues with the safety and regulation of the estate. The subsequent regeneration project is challenging but a vital undertaking to ensure that a similar disaster will never happen again. ■







# Reflecting on tech – What's in the toolkit?

Words by Stuart Cudmore MCIAT, Director, Munday + Cramer

Not so many years ago, an AT's toolkit would comprise of a Rotring pen set, Staedtler clutch pencil and a product manufacturer branded (freebie) scale rule. For some, it still does. However, from hand-drawn designs to the use of 3D modelling and CAD, technology and innovation have transformed the discipline.

We've moved away from the 2D space and stepped into a world of endless possibilities, with virtual reality and 4D visualisation for the most advanced rendering and visualisation.

Munday + Cramer are a CIAT Chartered Practice. Having moved to CAD in 1990 and 3D modelling in 2000, they have always been quite progressive as a smaller-scale practice. Head of Architecture, Stuart Cudmore MCIAT, reflects on the evolution of Architectural Technology over the past few decades, from the methods they used when the practice was first established to the technology that is now embedded into an AT's toolkit today.

**Remote sensing**  
Some of the most classic examples of technology in architecture are the various methods of remote sensing. One of these examples that has progressed most in recent years is LIDAR. Capable of building high-resolution Digital Terrain Models and Digital Elevation Models, LIDAR is advancing rapidly. Now with 4K imagery and high levels

of manoeuvrability, it is useful for construction mapping, detailed geological surveying, and ground investigation. Perhaps the most interesting development is that LIDAR is now available on the iPhone. This is not to suggest that architectural firms around the world drop everything and start working from their phones, but the increase in accessibility, portability and decrease in price for this technology is very exciting indeed.



Building Information Modelling (BIM) offers us a solution to the lesser-known impactful activities of the industry. Our carbon footprint can be reduced by streamlining workflow and timelines, reducing waste and minimising unproductive on-site time. All of this can be scheduled and managed with BIM; allowances can even be made for curing and drying time.

**Sustainable development**  
With worldwide construction output expected to increase by 85% into 2030, the demand for sustainable practices increases each day. In the age of the Anthropocene, sustainability must be at the forefront of our minds. From buildability to procurement and from scheduling to project management, Building Information Modelling (BIM) offers us a solution to the lesser-known impactful activities of the industry. Our carbon footprint can be reduced by streamlining workflow and timelines, reducing waste and minimising unproductive on-site time. All of this can be scheduled and managed with BIM; allowances can even be made for curing and drying time.

**Smart and emerging technology**  
From smartphones to smart fridges, it seems like there isn't anything left to get a 'smart' upgrade, but in an industry where engineering makes up a large part of operations, any opportunity to update and innovate should be welcomed. It's been great to see the leaps and bounds innovation has been taking in recent years. For example, smart glass or switchable glass, can allow residential builds differing levels of privacy and can allow the occupants to be more energy efficient. Recent uses can be seen in the Boeing 787 Dreamliner, opting to switch pull-down blinds for switchable electrochromic glass. However, smart glass for instance has been around for a while but isn't widely used in buildings as of yet. Perhaps it is something that is becoming more viable and affordable for wide scale use.

The world of augmented, virtual and mixed reality, known together as extended reality (XR), is becoming more and more intertwined with our own and we can find cases for using it daily. One in particular that stands out is ArchiCAD as it is BIM compliant and has facility for clients to review designs on their phones/tablets in virtual reality (or VR headset). These types of tools are becoming more and more widespread in the world of architectural design, as they can decrease your carbon footprint through planning, save money in wastage, and have the chance to showcase the project to investors and clients.

In conclusion, collaboration breeds innovation. Cloud-based collaboration, whether that be through a tool like ArchiCAD or through open access forums for new innovative designs, is the future of architectural innovation. This, coupled with a continuing development in other areas such as remote sensing, can make our progress in these areas near enough exponential. ■



# Practice information, education and guidance



**Is running your own Practice a career aspiration? Is it your goal to run your own business as a Chartered Architectural Technologist or in partnership or co-directorship with others?**

To give you a flavour, we have produced some information on what it requires, what CIAT provides you as a practising Architectural Technology professional, and how you would establish your own CIAT Chartered Practice.

Please visit [architecturaltechnology.com](http://architecturaltechnology.com), log in to the My CIAT area and select *Practice information, education and guidance*.



# CIAT