

Alchera Technologies uses artificial intelligence to automate infrastructure and smart cities.

We exist to help our clients build responsive, human-scale intelligence into their cities, transport systems and public and private spaces. Founded by researchers from the University of Cambridge & UCL, Alchera Technologies has a strong and rich pedigree of world-leading machine learning and computer vision sensing technologies.

At Alchera we design, develop and deploy a real-time data platform for the automation of smart infrastructure. With a strong core of computer vision leveraging existing video infrastructure, we fuse a number of data sources to provide real-time and predictive insights into the current state of a range of infrastructure and mobility assets.

We are looking for bright and enthusiastic individuals who can demonstrate a keen passion for technology and a desire to improve their knowledge and skills to join the team. Working with us means working in an energetic and fun start-up environment with a team of exceptionally talented colleagues, in a position to shape the future of transport and the built environment.

To apply, please get in touch at <u>careers@alcheratechnologies.com</u> with a 300-word cover letter and CV.

Deep Learning Internship

Deep Learning has added huge boost to the already rapidly developing field of machine learning and computer vision. At Alchera you will have the opportunity to apply Deep Learning on a variety of interesting problems, for example:

- Explore cutting edge developments in the Deep Learning field like capsule networks and ascertain whether they can help with complex classification tasks
- Use transfer learning, IE; in the context of vehicle classification
- Work on fun projects like detecting vacant parking spaces in still images and videos
- Use pretrained models like VNEY and YOLO and either apply them on traffic datasets or modify/retrain them for particular problems

Whilst working with Alchera the position would allow the intern to gain valuable experience in the area of Deep Learning which is a skill in high demand in industry and academia alike as well as being given the opportunity to work on their own dedicated project.

Skills and Qualifications

• Familiarity with coding



- Any exposure to deep learning and frameworks like mxNet or Torch.
- Experience with Tensorflow would be highly advantageous
- Experience with Python would be beneficial.

At Alchera we are passionate about what we do and have a diverse team, the intern will have the opportunity to be part of a ground-breaking company and be able to contribute towards its success.

Key information:

Location: Cambridge, UK Preferred start date: We are hiring interns on a rolling basis Duration: 8-12 weeks, with an opportunity to extend to a full-time position Salary range: Competitive