

Junior Computer Vision Engineer (SfM / SLAM / Drones)

WHAT DO WE DO?

Large structures are hard to build, but even harder to monitor, inspect and maintain. At TRIK, we believe that drones are the future of structural inspection. We want to enable everyone to be able to utilise drones in the easiest way possible.

TRIK is a drone software start-up that has been established for 3 years and we are now entering a growth stage. We turn drone photos into digital 3D models and enable customers to make comments in 3D. You can use the 3D models as a file directory to store data, compare changes or add measurements. We've won several awards for our innovative business solutions and are funded by top-tier investors like the UK government and the Founder of Zoopla. We're ambitious to do more and to add to our product pipeline as well as the solutions we offer our clients.

WHAT ARE WE LOOKING FOR?

We are looking for a junior computer vision engineer who likes computer vision and/or drone and love to have a hands on experience in applying their knowledge in the business.

You should have a good hands on experience in software development, and a strong foundational understanding of 3D projective geometric technologies related to multiple view 3D perspective geometry (e.g. projective mathematics, triangulation, stereo & multi-view geometry, vanishing points, homographies, epipolar search, SfM, SLAM, VIO, multi-view stereo, meshing, photogrammetry)

- Studied at least one module of Computer Vision in your degree OR have some experience creating/modifying SFM or SLAM algorithm/library
- Strong applied math skill in linear algebra, PDEs, 2D/3D projective mathematics
- Strong C++ software development skills in Linux environments
- Fluent in GIT, Docker or Kubernetes

A huge bonus if you come from strong academic and competitive university/lab or have experience working on 3D reconstruction in the industry in any field below

- 3D reconstruction and multiview geometry: building 3D geometric vision & 3D reconstruction technologies
- linear & non-linear optimization and bundle adjustment
- 2D computer vision feature-level image fundamentals
- 2D & 3D computer graphics

WHAT YOU WILL BE DOING?

You will be working from multiple open source library (SfM, MVS and SLAM) to combine and create a working pipeline that is optimised to our user case. You will be working with our full stack developer to deploy of the solution on the cloud.

You need to be able to drive the R&D development by yourself, with advice from our PhD computer vision consultant and an experienced software engineer (who might not have computer vision knowledge).

Note: Future work include using live feeds from a drone camera to generate a 3D model in real time, linking with ML (existing library) to do real time defect detection.

WHY US?

We're a small team so you will be an integral part of the R&D team, creating and iterating our code base. You will have a significant input in hiring the rest of the computer vision member and build the ideal R&D team. You also have a significant budget to buy any relevant hardware including computer, drone, VR/AR headset, etc.

This is a great opportunity to join a rapidly growing start-up business, you'll make a difference from the day you start with us. We offer the standard benefits you'd expect, including a pension scheme, 25 days holiday and the opportunity to purchase share options as well as a creative and flexible work environment where you can do your best work.

You can choose to either grow with us as a researcher or step up to manage the team. We have a structure to support both career paths.

If you're interested in joining the TRIK team take a look at our website www.gettrik.com and what we do <https://m.youtube.com/watch?v=9o90MZZCDYk#>