Job Specification:

3D Computer Vision / Machine Learning Scientists, Engineers and Architects

London | Palo Alto | Munich

3DI (www.3Dindustri.es) is a ground-breaking London-based AI company, building developer tools and algorithms to power disruptive applications at the intersection of the real and virtual worlds.

- 3DI is at the cutting edge of 3D machine vision. Its platform offers real time, real world 3D object recognition, analysis and search.
- Addressable markets are VR / AR, robotics, retail, manufacturing, autonomous vehicles, 3D printing, healthcare, security and architecture.
- Industry-shaping partners including HP, Autodesk, IBM, Sony and Siemens.
- International team of leading scientists from Cambridge, Princeton, Stanford and more.
- Operations in London, Palo Alto and Munich.
- Featured in Forbes, Inc.com and the BBC.

WHO WE ARE LOOKING FOR

Innovators and Rainmakers who want to build the future infrastructure of the spatial web

Superstar scientists, mathematicians, engineers, computer scientists, data scientists and developers in the following spaces:

- **Machine / deep learning**
- **Computer vision; pattern, image and object recognition**
- **3D Scene understanding**
- **3D shape-based retrieval and geometric analysis**
- **LiDAR and Geiger mode lidar data processing**
- **Applications of geometric algebra**
- **Multiplayer Game and Physics engine development**
- **3D scan analysis and scene segmentation**

SKILLSET

Required	**Python**; **C++ or C**; At ease in **linux** environments; **Cloud / server** understanding; Familiarity with point clouds and meshes; Knowledge of 3D file formats
Good to have	Javascript; CUDA, HTML/HTML5; PHP; Perl; 3D graphics; APIs; Experience with low-end 3D scanners, Tensorflow, PyTorch, embedded hardware, GPU and FPGA familiarity, experience working with large datasets, security clearance
Approach	Familiarity with **agile** and **scrum** methodologies.
Relevant	Geometry analysis & image processing . Pattern recognition . Computer vision . Parallelisation and scalability . Cloud computing . Data science . Machine / deep learning . Semantic search . 3D file format handling & compression.

CHARACTERISTICS & OUTLOOK

- **Talented**, **passionate** and **hacker**-minded individual who likes to lean in and lead.
- Versed in **academic** language. Able to assimilate cutting edge research to deploy and test.
- **Fast** and **versatile learner**. Able to pick up new ideas and techniques quickly.
- **Creative**, **independent** and **practical** thinker and DOER. Gets great things done quickly.
- **Tenacious** individual on a mission to **solve** problems every day.
- Good **team player** who is able to effectively **communicate** ideas.
- **Innovative** contributor of ideas and solutions with real **vision.**
- **Interested** in all-things 3D and latest industry developments.
- Strong **track record** and code deployment (preferably in pro environment, at scale).
- **Disciplined** work ethic with a focus on results and deadlines, no matter what.
- Laser **focus** on quality, speed and user / client value. Rapidly mocks-up demos.

WHAT WE OFFER

- Dynamic, exciting and fast-moving tech startup environment.
- Young, innovative and international team. You will be working alongside highly accomplished, motivated and passionate colleagues who are leaders in their field.
- Significant autonomy with ample opportunity to shape areas of activity and research.
- Access to the latest emerging products and devices (e.g. servers, headsets, sensors, scanners, handheld devices etc.)
- Direct interfacing with partners and clients at the world's leading technology firms.
- International experience; opportunities to work across Palo Alto, London and Munich.

WHAT YOU WILL BE DOING

- Working closely with the technology and product development teams.
- Building world-class code, products and solutions.
- Scaling and optimising existing codes, products, processes and architectures.
- Mocking up concepts and features, testing in situ, assessing, learning and repeating cycle.
- Keeping up with the latest research and trends to push the boundaries of what is deployed.

TYPE OF CONTRACT

- **Full time**; **Part time; Contractor**.
- Pay / conditions: **Market-leading** and **negotiable**. Dependent upon experience / record.

APPLICATION DETAILS

- Start Date: **Immediate** (ongoing)
- Application: **CV & cover email** to talent@3dindustri.es,
  Please detail: Examples of related work (code, web links etc.); Available dates for work; Visa status.