# Machine Learning (Sim2Real) Intern

Scaled Robotics is automating the problem of quality control and progress monitoring for construction. Delivering high-quality construction progress and quality assurance data to reduce risk and uncertainty on billions of dollars of assets globally. Working with some of the world's largest construction companies we are bringing artificial intelligence and robotics to an industry that hasn't seen innovation in almost a century.

Located in sunny Barcelona (right by the Barceloneta beach), our small multifaceted team of experts in robotics, mathematics, computer science, engineering and architecture are building some of the most advanced A.I tools the construction industry has ever seen. To join us on this journey, we are looking for people who are passionate about wanting to transform this \$7 Trillion manufacturing industry and drive our growth.

We have built a unique work environment that is innovative, open, and collaborative, where we value the ability to learn and grow.

As a **Machine Learning Intern**, you will be applying computer vision, graphics and machine learning techniques to allow our ML systems to learn from simulated point cloud and image data to improve our products. You will be working with the CTO and members of our learning and vision teams on state-of-the-art approaches in domain adaptation and domain randomization using deep neural networks.

## Your responsibilities

- Collaborate with vision and learning teams to develop software to generate simulated environments.
- Generate training data for ML models from simulated environments using techniques in domain adaptation and domain randomization.
- Implement prototypes to demonstrate potential value and validate ideas
- Communicate the insights with the rest of R&D teams

### Nice to have

- Current Masters/Ph.D student. in Computer Science, Mathematics, Statistics, Physics or related fields
- Background in Deep Learning (GANs), 3D Vision, Structure from Motion, Graphics Algorithms
- Strong fundamentals in the following: Deep Learning, Computer Vision, Nonlinear Optimization
- Strong software development skills (C++, Python)
- Experience with any commonly used simulators: Unity3D, NVIDIA ISSAC, Gazebo

- Experience with commonly used software libraries for CV & ML: Tensorflow, Keras, PCL, OpenCV
- Experience with CUDA programming
- Publication in top tier conferences NIPS, ICML, ICRL, CVPR, ICCV, ECCV etc

#### **Perks**

- Possibility to work with top people with experience in startups, robotics, computational design and fabrication, engineering, computer science, and other cool stuff.
- Competitive salary
- Flexible hours and remote working possibilities
- Fully stocked kitchens
- Modern stylish office in Poble Nou with fully stocked kitchens.
- A great and international work environment.
- Team-building activities

## Scaled Robotics in the last year

- Winner of TechCrunch Startup Battlefield (Berlin 2019)
- Voted as one of the best Robotics Startups in Europe.
- Featured on multiple prominent media outlets including TechCrunch, Forbes, Robotics and Automation News
- Closed a €2 million financing round

We strongly encourage women and minorities to apply.

We are looking to build a strong team that has a diversity of race, gender, sexual orientation, religion, ethnicity, national origin and all the other fascinating characteristics that make us different. Our vision for Scaled Robotics is to build a work environment where a diverse mix of talented people want to come, to stay, to learn, do their best work and grow along with the organization. We pride ourselves on being at the forefront of innovation in construction robotics and we know our company runs on the hard work and dedication of our passionate and creative employees.

When applying address the application to Bharath and let me know why you want to join our team.

Apply directly to

info@scaledrobotics.com