



We look for the risk-takers, the collaborators, the inspired and the inspirational. We want the people who are brave enough to work at the cutting edge and create solutions that will enrich and improve the lives of people across the globe. So, if you want to make the world say wow, let's talk. The conversation starts here. If this role matches your ambitions and skillset, let's get started with your application.

The Stuttgart Laboratory 1 (SL1), which is part of the Sony Corporate Research and Development Center, conducts research in the areas of "Computational Imaging, Computer Vision, Perception Systems, RF Communications, Artificial Intelligence and Speech & Sound Processing". SL1 is mainly located at the Stuttgart Technology Center (STC) in Germany, but also includes an office in Zürich, Switzerland. This is an Internship or Master Thesis position at SL1, either in Stuttgart or in Zürich. We are looking for a talented, motivated and software affine

## Computer Vision Research Intern (m/f)

to conduct basic algorithm development, work on demonstration prototypes with camera hardware and help to build a strong research portfolio from bottom up.

### Your responsibilities will be

- Basic algorithm research in the field of event-based sensing, neuromorphic perception or 3D reconstruction.
- Development and implementation of computer vision algorithms on real-time platforms
- Implementation of proof-of-concept demonstrators with novel cameras and devices from robotics
- Support establishment of a R&D infrastructure which facilitates teamwork for research & development

### Profile:

- Currently pursuing an MSc degree or equivalent in Computer Science or Engineering (Robotics, Mechanical, Electrical, or similar)
- Experience with computer vision principles and related linear algebra and machine learning theory
- Experience in one or more of the following areas is a plus:
  - Optical, image sensor, or camera technology
  - Event-based cameras, robotics or autonomous vehicles
  - Development and implementation of neuromorphic perception algorithms with spiking neural networks for neuromorphic hardware
  - 3D reconstruction
  - Embedded software development and/or ROS
  - Knowledge of version control (git, svn)
- We expect passion for good software with strong skills in Python and/or C++ and related tools
- We hope for good communication skills and willingness to work in an agile team
- Excellent oral and written English

### We are looking forward to receiving your application.

- Documents: CV, grades, application letter, and (if available) recommendation letters or work certificate. Applications without a complete CV and list of grades cannot be considered.
- The application letter should include whether you are interested in an Internship or Master Thesis position as well as the earliest possible starting date.
- In general, Master Thesis and Internship positions should last 6 months
- Please refrain from applying, if you have already graduated or you will be by an expected start date

### Please send your application to:

Email: Belen.Rodriguez.Guerrero@sony.com

Subject: Computer vision research internship (SL1)