

Research Intern – Machine Intelligence, Advanced Robotics, Automation & Control

Are you interested in shaping the Advanced Manufacturing of the Future? Here's the right internship opportunity for You!

Join our research group Advanced Manufacturing Automation located in Berkeley, CA for a 3 – 12 month internship, and investigate the latest advances in artificial intelligence, machine learning and optimization, in diverse application areas such as smart factories, intelligent buildings, and advanced robotics. Our close contact to different business units in Siemens provides the opportunity to contribute to and gain experience in real industrial applications. During this internship, you will experience the excitement and challenges of industrial research.

Siemens Background

For nearly 170 years, pioneering technologies, and the business models developed from them, have been the foundation of Siemens' success. Our central research and development unit, Corporate Technology (CT) plays an important role in this. Together with its global network of experts, CT is a strategic partner to Siemens' operative units. Siemens' central research and development arm sees itself as a strategic partner to the company's businesses. It plays a key role in achieving and maintaining leading competitive positions in the fields of electrification and automation while at the same time helping Siemens fully tap into the growth field of digitalization.

Our Berkeley facility is recognized for providing a stimulating environment for highly talented and self-motivated students. You will have the opportunity to test your knowledge in a challenging problem-solving environment. You will be encouraged to think out-of-the-box, innovate and find solutions to real-life problems. Our team has a strong publication record in leading journals and conferences.

What are my responsibilities?

- You will contribute to industrial research projects on applying machine learning for planning, control and state estimation in complex tasks performed industrial robots.
- You will collaborate and exchange ideas with experts in the fields of automation and control.
- You will implement concepts and solutions in prototypes.

What skills are needed to qualify for this internship?

- A current graduate student in Engineering, Computer Science or Mathematics
- PhD student in Engineering, Computer Science or Mathematics is preferred
- Strong fundamentals in machine learning concepts.
- Experience in prototyping algorithms and working with robots using ROS necessary.
- Good programming knowledge in Python, and C++
- Familiarity with deep learning tools (Caffe, Tensor Flow, Theano)
- Knowledge of advanced control concepts like model-predictive control preferred
- Excellent team working and communication (verbal & written) skills in English
- Flexibility and adaptability to work in a growing, dynamic, interdisciplinary team of experts.
- Successful candidate must be able to work with controlled technology in accordance with US Export Control Law. US Export Control laws and applicable regulations govern the distribution of strategically important technology, services and information to foreign nationals and foreign countries. Siemens may require candidates under consideration for employment opportunities to submit information regarding citizenship status to allow the organization to comply with specific US Export Control laws and regulations.

Interested?

Contact: juan.aparicio@siemens.com