# Airity Technologies Internship Position

#### Company name:

Airity Technologies, Inc.

### About the company:

Airity Technologies, Inc. develops and sells advanced power conversion technologies, including the world's smallest high-voltage power supplies. Our circuit topologies provide more efficient and compact high-voltage pulse, DC, and radio-frequency sources. These have been applied to high-bandwidth communications, semiconductor manufacturing, electrical satellite propulsion, cold plasma for environmental applications, as well as lighting, medicine, and research where high performance, low cost, and extremely small size and weight are important and enable new technologies.

Airity leverages proprietary IP and leading research in power electronics from Stanford University. The company is based in Redwood City, CA, and is expanding through a combination of product sales and close collaborations with leading clients.

#### Position title:

**Engineering Intern** 

### Responsibilities:

The intern will be an integral part of our team as we work on several projects related to new pulsed high-voltage power products. The position may encompass a versatile set of responsibilities including

design and implementation of electrical circuits and printed circuit boards, design and manufacturing of mechanical systems or end applications, or characterization and data analysis related to new prototypes.

- Design and implementation of electrical circuits and surface mount printed circuit boards
- Assembly of surface mount PCB board and test of circuits after assembly
- Auromated testing of electrical circuits and components using computer-controlled data collection
- Analysis of collected data and visualization using python
- Design and manufacturing of mechanical systems or end applications
- Design 3D models for different projects
- Testing high voltage (10 s of kilovolt) circuits
- Research on cutting edge technology such as plasma
- Any other tasks that the management may deem necessary to complete client project deliverables

### Who should apply:

We are looking for talented students eager to work on diverse problems. The typical candidate has a background in engineering or science fields but our previous experience with Singaporean interns showed that the exact field matter less than a practical mindset, a willingness to take on the challenges of the moment, and an ability to get things done. Preferred candidates are:

- Able to pick up new skill rapidly and being able to adapt to different roles in the company
- Self-motivated, driven, independent, and able to work without supervision if necessary
- Works well in a fast-paced environment and is and able to communicate well with others
- Willing to try out different tasks everyday
- Creative thinking and able to think on the spot
- Smart and hard working

### Required expertise:

We prefer an engineering or science background with at least some knowledge in electrical engineering. Prior experience in power electronics, embedded systems, or plasma science is highly valued.

- Must have basic electrical engineering knowledge
- Hands-on experience in building things is preferred
- Good physics and math skills is a must
- Coding skill is preferred

## Preferred skills/Majors:

Electrical engineering, mechanical engineering, engineering physics etc.

# What you will learn

- Advanced power electronics knowledge, such as class E amplifier
- Improve your hands-on skill to practically solve a problem
- Data analytics
- Reading engineering drawings and assemble circuit boards from just those drawings
- What it takes to run a start-up
- How to treat people correctly
- Good presentation and writing skills
- And many other skills that you will pick-up on a daily basis

### Internship location:

Redwood City, CA

# Remarks

- Compensation: \$3,000 per month
- Duration: A minimum duration of 12 weeks.
- Internships in the US require J-1 intern visa sponsorship. Contact Elizabeth Kay at <a href="mailto:ekay@fusia.net">ekay@fusia.net</a> for questions.
- Interns handle their own accommodation and health insurance and responsible for visa related fees USD 1,550 J-1 intern visa sponsorship, USD 220 SEVIS fee, USD 185 nonimmigrant visa application fee