# Siddhanathan **Shanmugam**

Philadelphia, PA 19104

🛘 +please (email) for-details 💹 🗷 ss3774@drexel.edu 🔠 🥻 siddhanathan.github.io 📙 🗖 siddhanathan

### **Education**

**Drexel University** Philadelphia, U.S.A.

**B.S. IN COMPUTER SCIENCE AND ENGINEERING** 

- Member of the Pennoni Honors College.
- Received an A. J. Drexel Scholarship.
- Listed on the Dean's List for academic excellence.

# Experience \_\_\_\_\_

#### **Geoffrey Mainland, Drexel University**

RESEARCH ASSISTANT

• Worked on Ziria, a programming language and compiler for low-level bitstream processing.

- Ported the compiler-toolchain to Linux.
- Profiled the C-backend for performance bottlenecks, and optimized slow sections of the C-backend.
- Wrote tools to auto-generate performance charts.
- Worked on an OFDM implementation which uses a VHDL-backend.

CDM Inc. Philadelphia, U.S.A.

• Wrote parsers for binary file formats dealing with big data.

- Used data analytics to help engineers understand their data.
- Developed and deployed web applications which made repeated data analysis easier.

Canonical Ltd. London, U.K.

VOLUNTEER

DATA ANALYST

• Tested unstable packages and reported bugs for QA/QC.

**Sympy Development Team** 

MENTEE

• Used Sphinx to auto-document Sympy source code.

Google Code-In

Sep. 2011 - Feb. 2012

Philadelphia, U.S.A.

Jun. 2014 - PRESENT

Sep. 2010 - Sep. 2014

Sep. 2013 - PRESENT

Philadelphia, U.S.A. Sep. 2015 - PRESENT

Sep. 2014 - Apr. 2015

## **Extracurricular Activities**

#### **Drexel Institute of Electrical and Electronics Engineers**

HEAD TECHNICAL CHAIR

**Drexel Linux Users Group** Philadelphia, U.S.A.

PRESIDENT & FOUNDER Sep. 2015 - PRESENT

**Drexel Hyperloop** Philadelphia, U.S.A.

CONTROL SYSTEMS ENGINEER Sep. 2015 - PRESENT

**DragonHacks** Philadelphia, U.S.A.

**ORGANIZER & HEAD TECHNICAL DIRECTOR** Sep. 2014 - PRESENT

# Presentation \_\_\_\_\_

#### **SpaceX Hyperloop Pod Design Competition**

PRESENTED AN IMPLEMENTATION OF THE SPACEX HYPERLOOP ALPHA PAPER

• Proposed a revolutionary approach for Hyperloop pod controls to SpaceX engineers.

Texas A&M, U.S.A.

Jan. 2016