Oliver Grassmann

https://olivergrassmann.com

Dedicated senior computer engineering student seeking to bring value based on my experience in approaching hardware/software co-design with analytic and critical thinking, collaboration with diverse teams, and a drive for personal and professional development.

Education

Saint Louis University
St. Louis MO, Madrid Spain
May 2020 (Expected)

B.S. Computer Engineering, Minor Computer Science
Current Senior

Senior Design Project

Collaborate with and coordinate small interdisciplinary team of biomedical, electrical, and computer engineers to design and build a medical biosensor to detect emboli – detached clots traveling through the circulatory system – caused by deep vein thrombosis.

Experience

Student Intern – Technical I, AT&T Services Inc., *Summer 2019*

- Researched, implemented, and documented Strong Authentication solution for secure online services in coordination with dispersed teams resulting in an automated authentication standardization in compliance with updated corporate data safety protocols.
- Developed API and front-end tools to streamline user experience and improve organizational efficiency between business units directly saving 103 man-hours per quarter and enabling further cost savings of $73,000/year through the creation of data hooks for tools automating network maintenance tasks.

Research Assistant, SLU – Aircraft Computational & Resource Aware Fault Tolerance (AirCRAFT) Lab, *2018-2019*

- Coordinated with researchers to develop tools to compile drone tracking training data for TensorFlow, a neural network, using open source computer imaging tools.

Advanced Automation Intern, Komatsu Mining Corp., *Summer 2018*

- Designed and implemented robust Human-Machine Interface (HMI) program for fully and semi-autonomous mining systems with a focus on safety, longevity, maintainability, and upgradability.
- Collaborated with manufacturing and field service technicians to develop sophisticated software deployment tools for embedded automation systems, resulting in an elimination of user configuration and dependency errors.

Electrical Engineering Mentorship, Dynamic Glass Products, *Summer 2018*

- Designed and assembled power supply and control systems for custom, high-voltage applications.
- Collaborated with engineers and business professionals to improve manufacturing processes.

Web Streaming Media Development Intern, Logan Productions, *Summer 2017*

- Developed custom live-streaming web apps, configured remote servers, performed vital hardware maintenance.

RF Communications Subsystem Researcher, SLU – Space System Research Lab (SSRL), *2016-2017*

- Cooperated with interdisciplinary team of engineering students to design and manufacture CubeSat, investigated implementations of software defined radios, and engaged with local businesses to secure sponsorships.

Leadership & Involvement

Institute of Electrical and Electronics Engineers (IEEE), Professional Member, *2016-Present*

Rainbow Alliance, LGBT+ Advocacy on Campus, *2016-Present*

Engineering Learning Community, Volunteer and Cooperative Learning Community, *2016-2017*

Boy Scouts of America, Eagle Scout, *2016*

FIRST Robotics, FRC Team 1732, *2013-2016*

Technical Skills

Experienced in hardware/software co-design with specialization in FPGA/PLC development in VHDL, embedded system design, object-oriented and low-level programming, machine learning, and robotics.

C++	Python	Java	C#	Eagle PCB	Xilinx ISE	AWS
VHDL	C	JavaScript	.NET Core	SVN	Git	Adobe CC
SQL	PHP	Bash	Node.js	Visual Studio	VMWare	Office 365
MATLAB	Assembly	Swift	Linux	Windows	Atmel Studio	ARMv8
ARMv7	Xilinx Vivado	GCC	FPGA	PLC	RS232	USB
PCI	ISA	x86	Bluetooth LE	Android Studio	TCP/IP	TensorFlow
Neural Network	OAuth	AI	Jupyter	Arduino		