

Ailin Yu

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Education

Case Western Reserve University, Cleveland, Ohio

Bachelor of Science in **Systems and Control Engineering**, May 2017

Bachelor of Science in **Computer Engineering**, May 2017

Bachelor of Arts in **Music**, May 2017

Class Level: Senior

Minor: **Computer Science**

Overall GPA: **3.8**

Dean's High Honors List

Experience

Rockwell Automation, Cleveland, OH

Hardware Engineering Co-op, May 2016 – Present

- Designed interface for bidirectional communication between ASIC and external backplane
- Designed monitoring software for data acquisition and analysis for PCB thermal testing
- Created interfaces for peripherals and communications protocols for ASIC emulation

Sensing and Interactions Laboratory, Case Western Reserve University

Undergraduate Researcher, August 2015 – January 2016

- Added automatic file integration and optimized user interface of Google Glass program for acupuncture assistance
- Analyzed tracking and descriptor extraction algorithms for implementation in medical application
- Revised, edited, wrote literature review for paper for publication on face tracking for acupuncture assistance

New Generation Power Efficient Computer Systems Design, Washington State University REU

Undergraduate Researcher, June – August 2015

- Designed hardware implementations of machine learning classification mechanisms for dynamic voltage and frequency scaling of voltage and frequency islands
- Implemented generalized dynamically reconfigurable decision trees using VHDL
- Analyzed efficiency and performance of designs using Synopsys tools for future optimizations

Skills

Languages: Verilog, SystemVerilog, Java, VHDL, MATLAB, C++

Experience: FPGA, ROS, Android, Google Glass, and Arduino Development; Git and IManage version control

Programs: Altera Quartus, Cadence Incisive Synopsys, Android Studio, IntelliJ, Weka

Publications

Peer Reviewed Journals

Poffenberger AR; **Yu A**; Zhou N; Yu S; Crowder MW; Sutton LD. *A chromogenic monobactam for monobactamase assays* submitted to Journal of Antibiotics (In Revision)

Honors

ALDEN Scholarship for Systems and Control Engineering Recipient

- Awarded to exceptional students in systems and control engineering

Eta Kappa Nu, IEEE Honor Society

- Official honor society of IEEE, top 25% of juniors and seniors admitted

Music for Performing Arts Scholarship

- Full tuition scholarship awarded for exceptional virtuosic performance

Campus Leadership

Robotics Club, Combat Robot Division

- Designed and built vertical spinner and wedge beetle weight division robots for National Robotics Competition 2016 Wittke Award Student Selection Committee

- Nominated by faculty member to select two professors of Case Western Reserve University as recipients

Music Undergraduate Student Involvement Committee, Secretary

- Recorded relevant information from meetings and assisted in organizing events and performances