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## EMERSON W JACOBSON

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### EDUCATION

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**University of California, Riverside** 4.00 GPA **Expected Spring 2022**

- Bachelors of Science, Computer Science
- Notable Courses: Machine Organization & Assembly Language, Logic Design, Intermediate Data Structures and Algorithms, Compiler Design
- Courses Expected by Graduation: Advanced Embedded and Real-Time Systems, Operating Systems, Advanced Computer Architecture, Concurrent Programming and Parallel Systems, GPU Computing & Programming

**El Camino College** **Fall 2016 - Spring 2020**

- Associates of Science in Mathematics, Certificate of Computer Science
- Notable Courses: Data Structures, Differential Equations with Linear Algebra, Advanced C++, Python, Java

### EXPERIENCE

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**Undergraduate Research** **January 2021 - Present**

- Study the power usage of GPU accelerated embedded systems under various workloads.
  - Jetson AGX Xavier and Nano
- Discover power-savings through Dynamic Voltage and Frequency Scaling (DVFS).

**TUNE Summer Research Program** **July - September 2020**

- 10-week research program.
- Developed Continuous Integration workflow with support for Nvidia GPUs.

**Magikid Robotics - Instructor** **August 2018 - July 2020**

- Initial employee teaching robotics and programming to children aged 6-13.
- Lead multiple VEX IQ, FIRST Lego League, World Robotic Olympiad, and Wonder League Robotics Competition teams.

**ACM Chapter President** **August 2017 - August 2020**

- Worked in organizing meetings, guest lectures, code competitions, and code camps.

**FIRST Robotics Mentor** **2016 - 2017**

- Worked with students from Redondo Union and Mira Costa High School.
- Helped students design and program autonomous and user controlled robot functions.
- Team of 45+ students split into Mechanical, CAD, and Programming subteams.

### LANGUAGES AND TECHNOLOGIES

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- **Languages:** Python; C++; Java; Javascript/TypeScript/NodeJS; Verilog; MySQL; Bash; HTML/CSS;
- **Tools/Frameworks:** Linux; Git/GitHub; Docker/Swarm; CUDA; Angular; Proxmox; Firebase;