Evan McNeil

https://rainwaffles.github.io/

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Education

- **University of California, Berkeley** — Berkeley, CA
  Bachelor's in Computer Science; GPA: 3.96; CS Course GPA: 4.0 — *Aug. 2017 – May 2020 (expected)*
  - **Coursework**: The Structure and Interpretation of Computer Programs; Data Structures; Great Ideas in Computer Architecture; Designing Information Devices and Systems; Discrete Mathematics and Probability Theory; Efficient Algorithms and Intractable Problems; Operating Systems; Computer Security; Artificial Intelligence; Databases

Experience

- **EyeCloud** — Hangzhou, China
  Algorithm Design Intern — *May - August 2018*
  - **Face Detection and Recognition**: Wrote and employed machine learning algorithms with TensorFlow to recognize people and faces with state-of-the-art accuracy.
  - **Performance Tensor Computing**: Optimized neural networks to run on mobile platforms and researched novel pruning methods to condense existing networks.
- **AUVs at Berkeley** — Berkeley, CA
  Software Design Consultant — *Aug. 2017 - May 2018*
  - **Systems Design**: Advised in the mechanical, electrical, and software design of a new autonomous submarine. Found solutions for the implementation of control schemes and estimations of probability functions based on highly noisy data in an underwater environment.
- **Amador Valley Robotics Team** — Pleasanton, CA
  President; Software Engineer — *Aug. 2013 - July 2017*
  - **Leadership**: Led a team to design and create a completely autonomous submarine and compete in the annual collegiate Robosub competition. Finalist (7th) at Robosub 2015, with the highest-scoring run.
  - **Control Systems**: Created a proportional integral derivative (PID) controller to facilitate the navigation of the submarine underwater and wrote a simulator to test its functionality.
  - **Statistical Modeling**: Developed a Baysian network for recursive estimation of the submarine's position.
  - **OpenCV**: Wrote vision processing software using OpenCV to detect and navigate toward an underwater gate.
- **ACE Coding** — Pleasanton, CA
  Co-President; Instructor — *Aug. 2014 - July 2017*
  - **Community Service**: Taught Java, C++, and Scratch to middle school students at Harvest Park Middle School in an after-school program. Directed curriculum and organized yearly hackathons.
- **Autonomous Systems Laboratory** — Stanford, CA
  Research Intern — *Summer 2016*
  - **C++**: Implemented multi-threading for a distributed consensus algorithm using ROS.
- **Movidius** — San Mateo, CA
  Software Intern — *Summer 2015*
  - **Vision Processing**: Designed and wrote software on Movidius Myriad vision processing chip.
- **Coder Central** — Pleasanton, CA
  C++ Instructor — *Summer 2015*
  - **Teaching**: Taught middle and high school students how to program in C++ in a free 6-week course.

Projects

- **Alameda County Science and Engineering Fair Honorable Mention**: Project – "Designing a Protein to Remove Beta-Amyloid Plaques from Alzheimer's Brains"

Programming Skills

- **Languages**: C++, Java, Python, Bash, LaTeX **Technologies**: OpenCV, AVR, ROS, Solidworks

Interests

- Vision processing, machine learning, control systems, video games, fencing, rock climbing, hiking, dogs.