William Arnold

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EDUCATION

University of California, Berkeley, College of Engineering Class of 2021   *With a focus on*
BS – Electrical Engineering and Computer Science Major, Math Minor   Machine Learning
GPA: 4.0, Highest Honors, University Medal nominee   Theoretical Physics

EXPERIENCE

Eluvio   Berkeley, CA
Software Engineer   *June 2020 — August 2020, October 2021 — Current*
- Built a high security distributed key-management system in Rust.
- Developed and deployed a non-custodial e2e payments protocol on Solana for marketplace platforms.

Hyperion Maritime   Nantucket, MA
Race Crew & Deckhand — Santana   *June 2021 — August 2021*
- Raced and maintained Santana, a classic 55' yawl built in 1935 by Sparkman & Stevens.

UC Berkeley   Berkeley, CA
Undergraduate Student Instructor & RL Researcher   *August 2018 — May 2021*
- Conducted research in Prof. Spanos lab on Reinforcement Learning in Energy Systems leading to a 3 week energy usage experiment in Singapore.
- Taught undergraduates discreet math and probability theory (CS70) in person and virtually. Held office hours, proctored, and graded exams.

Procore Technologies   Santa Barbara, CA
Machine Learning Intern   *June 2019 — August 2019*
- Combined supervised image encoding with Gaussian clustering in order to find latent classes in a dataset of construction images, creating a low-noise, domain-specific dataset 8x larger than any existing dataset and greatly increasing model performance.

Activate Inc., at Google   San Francisco, CA
Technical Lead   *February 2016 — August 2018*
- Implemented a spatial, unsupervised machine learning algorithm to identify the most attractive food concepts around 50+ locations in the Bay Area for a Fortune 500 company.
- Built a model to predict how Google employees move and eat in on-campus cafeterias to reduce food waste.

Skydeck Berkeley   Berkeley, CA
Data Analyst and Ambassador   *July 2016 — July 2018*
Gradescope   Berkeley, CA
Android Developer   *September 2014 — July 2016*

PUBLICATIONS

1. Adapting surprise minimizing reinforcement learning techniques for transactive control. In *Proceedings of the Twelfth ACM International Conference on Future Energy Systems*, e-Energy '21. 2021 (1st author)

2. Pricing in prosumer aggregations using reinforcement learning. In *Proceedings of the Twelfth ACM International Conference on Future Energy Systems*, e-Energy '21. 2021 (3rd author)

SKILLS AND COURSES

Blockchains	High Performance Computing	Rust	Cryptography
Data Analysis	Quantum Field Theory	General Relativity	Distributed Systems
Machine Learning	Reinforcement Learning	Probability Theory	Trustless Systems

ACTIVITIES

Cal Sailing Team — Varsity Skipper and Fleetmaster   *August 2018 — May 2021*
Sailed for UC Berkeley and maintained FJs at Treasure Island Sailing Center. Bowman, Skipper in Big Sail 2018, 2019 against Stanford at St Francis Yacht Club.