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   Reinforcement Learning
GPA: 4.0, Highest Honors, University Medal nominee   Applied Cryptography

EXPERIENCE

Eluvio   Berkeley, CA
Cryptosystems Engineer   *June 2020 — August 2020, October 2021 — Current*
- Built a high security key-management system using AMD SEV.

- Designed and implemented a prototype consumer–scale, identity–based asset access scheme to allow content secured by an ethereum–backed system to be securely and efficiently managed.

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*
- Taught undergraduates taking discreet math and probability theory (CS70) in person and virtually, including topics such as Galois Field Theory, Countabililty, Berlekamp-Welsh, and Probability Theory. Held office hours, proctored, and graded exams.

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

Activate Inc., at Google   San Francisco, CA
Technical Lead   *February 2016 — August 2018*
- Organized and implemented a feature–diverse, 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 deep learning model to predict how individuals move and eat in Google Cafes to reduce food waste and ensure more effective resource utilization in future Google buildings.

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

PUBLICATIONS

1. William Arnold, Tarang Srivastava, Lucas Spangher, Utkarsha Agwan, and Costas Spanos. 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

2. Utkarsha Agwan, Lucas Spangher, William Arnold, Tarang Srivastava, Kameshwar Poolla, and Costas J. Spanos. Pricing in prosumer aggregations using reinforcement learning. In *Proceedings of the Twelfth ACM International Conference on Future Energy Systems*, e-Energy '21. 2021

ACTIVITIES

Cal Sailing Team — Varsity Skipper and Fleetmaster   *August 2018 — May 2021*
Sailed for UC Berkeley and maintained FJs at Treasure Island Sailing Center, competing in Pacific Coast Conference Regattas. Bowman, Skipper in Big Sail 2018,2019 against Stanford in J/22s at St Francis Yacht Club. Held racing tactics and sail trim lessons for team members.