Vy Ai Ly

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EDUCATION

University of California, Berkeley
Bachelors in Computer Science and Cognitive Science | May 2017 | 3.63 GPA
Upsilon Pi Epsilon (UPE) Member - Computer Science Honors Society
Coursework
Computer Science:
> **Completed:** Computer Programs(CS61A), Data Structures(CS61B), Machine Structures(CS61C), Linear Algebra and Differential Equations(Math54), Discrete Mathematics and Probability Theory(CS70), Artificial Intelligence(CS188), Algorithms(CS170), Ruby on Rails, Databases(CS186), Networks(CS168), User Interface Design(CS160)

Cognitive Science:
> Social Psychology, Issues in Cognition, Neuropsychology, Stigma and Prejudice, Computational Modeling of Cognition(CogSci131)

EXPERIENCE

Mann Consulting, Software Engineer Intern(Web/Databases) | Jun 2015 - Aug 2015
A small tech consulting firm that provides IT support to clients, such as home offices or small businesses
- Integrated resource scheduling in the company's custom CRM solution with Google Calendar
- Created an internal administrative client appointment scheduling tool that parses a user's command to offer recommended time slots
- Conducted user research to design and create a web page in PHP to simplify employees' data entry with auto-filled fields by retrieving and filtering data from the FileMaker database and Zendesk API.

UC Berkeley Athletic Center, Web Developer | Nov 2014 - Jun 2015
- Provided real-time data for coaches on their athletes' academic progress with PHP, Bootstrap, and FileMaker.
- Cleaned up pre-existing code stylistically by replacing inefficient logic, shortening the code by 30%.

UC Berkeley GAAMAC, Website Manager | Dec 2014 - Jun 2015
- Created, added, and curated content for the GAAMAC(Global Action Against Mass Atrocities) website with Professor Tetsushi Ogata.

UC Berkeley Research, Global Warming Research Apprentice for Professor Michael Ranney | Jan 2014 - Jun 2015
- Provided feedback on new studies, materials, and theories.
- Designed and administered surveys through Qualtrics to investigate how people's understanding of global warming mechanisms affect their belief of global warming.
- Invited RCME (Research in Cognition and Mathematics Education) Colloquium Series talk, University of California, Berkeley. Ranney, M. A., Arnold, O., Fujinomaki, R., **Ly V.**, Yan, E. X., Payne, A., Tran, A., Gan, L. W., & Chang, C. (2014, October). Can Conceptual Change Be Simple, Even If It's Not Easy? Experimental and Survey Evidence Plus www.HowGlobalWarmingWorks.org.

UC Berkeley Data Lab, Data Lab Assistant | July 2014 - Present
- Assisted patrons with Python and NumPy data analysis questions.

SKILLS
Python, Java, C, PHP, Ruby on Rails, CSS, HTML, Android

ACADEMIC PROJECTS
- **Pacman(Python) -** Implemented AI through A* search, value iteration, and Q-learning.
- **NP-Complete Traveling Salesman Solver(Python) -** Finds shortest route between cities with the added restriction of not being able to visit 3 cities of the same color (red or blue) using a mix of simulated annealing, nearest-neighbors, and Held-Karp algorithm.
- **MapReduce(Apache Spark) -** AWS EC2 distributed parallelized BFS for large data

SIDE PROJECTS
- **Beautiful Calcium(Javascript, CSS, and HTML) -** Interactive, fun site that explains the American Bone Health Association's Rule of 300. Design for Good Hackathon Best Design.