Kevin Moy

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Education

UNIVERSITY OF CALIFORNIA, BERKELEY **(AUG 2018-PRESENT)**

GPA: 3.5/4.0

Double Major: B.A., Computer Science + Data Science (Computational Biology Domain Emphasis)
Expected Graduation: December 2021

Relevant Coursework

CS162: Operating Systems (C), CS61C: Great Ideas in Computer Architecture (C, Python), CS186: Introduction To Database Systems (Java, SQL), CS61B: Data Structures (Java), CS170: Efficient Algorithms and Intractable Problems

Skills

- Programming expertise (by proficiency): Python, Java, C, C++, Go, Ruby on Rails, AWS, C#, SQL, JavaScript, HTML5/CSS
- Docker Container, Vagrant
- Software Security, Network Security
- Linux OS Manipulation, Bash Shell Scripting
- Test-Driven Development: creation of comprehensive unit and integration-tested code.

Work Experience

Undergraduate Researcher **AUG 2020 – PRESENT**

- Conducted research in correlation and the K-nearest neighbors algorithm under the supervision of Prof. Joshua Hug (UC Berkeley), specifically to find reasoning behind AQI report discrepancies in times of wildfire and high wood smoke
- Within a one-week span, learned and utilized the CSV, OS, and BeautifulSoup Python libraries to web-scrape and populate PM2.5 values of various air quality sensors around California.

CS61A Course Tutor and Mentor, UC Berkeley EECS **AUGUST 2019 – AUG 2020**

- Prepared and ran weekly sections reinforcing computer programming concepts in Python (e.g. generator functions, trees, object-oriented-programming) with 5 students in a personalized, meeting-like setting
- Contributed to development, testing, and quality improvement of Berkeley EECS's standard online exam tool testing format (exam.cs61a.org), specifically through formatting and creation of midterm-generating markdown files

CSC100 Teaching Assistant, UC Berkeley Data Science **MAY 2020 – AUG 2020**

- Prepared and taught biweekly discussion sections of 30+ students to reinforce fundamental data science concepts, e.g. modeling, regression, principal component analysis, XML/web scraping, etc
- Collaborated with other undergraduate instructors to design and audit curriculum material
- Extensive experience with debugging student code and deducing conceptual flaws in office hours, discussion sections, and lab sections

Full Stack Developer Intern, Next Island Virtual Reality **JAN – AUG 2017**

- Improved project code build process time by 10% by modifying existing Bash shell scripts.
- Contributed to UI development using Unity Engine and C#, mainly through fixing app bugs.

Projects

ChessDB-Remastered (Java), Lead Developer

- Utilized application and GUI programming knowledge via JavaFX libraries as well as chess expertise to create a chess-playing application coupled with a database for storing chess games

KAWHI-BOT (Python), Lead Developer

- Coded a specialized basketball-chatbot program which utilized randomized rule-matching and machine-learning principles to output human-like responses to a series of basketball-related questions.

MOOCBase (Java), Lead Developer

- Utilized knowledge of relational databases and optimization to developed a bare-bones simplified relational database system that implemented various key database capabilities such as join algorithms, query optimization, concurrent transactions, resource locking, and recovery.