Matthew Xie

mkxie@berkeley.edu | (925) 997-1661 | linkedin.com/in/matthewkxie/

EDUCATION

University of California, Berkeley **Fall 2017— Spring 2021**

BA, Computer Science

Coursework: The Structure and Interpretation of Computer Programs, Data Structures, Designing Information Systems and Devices, Foundations of Data Science, Discrete Mathematics and Probability Theory (IP), Principles and Techniques of Data Science (IP), Social Implications of Computing (IP)

GPA: 3.61

SKILLS

Programming: Java, Python, cmd/Bash, SQL, HTML/CSS, Scheme
Software: Git, IntelliJ, Eclipse, NumPy, Linux, Vim, Ansible, Cron
Methodologies: Agile/Scrum

EXPERIENCE

High Performance Computing Intern—*Lawrence Livermore National Laboratory*
June 2018—August 2018

- Automated installation and configuration processes on Linux-based HPC clusters using Ansible (cmd/Bash).
- Added functionality and new features to an existing python software suite for virtual machine automation and orchestration. Improved efficiency by eliminating the need to do tasks through a GUI (Python).

Research Intern—*UC Davis Dept. of Veterinary Medicine: Molecular Biosciences*
June 2016—July 2016

- Performed original research under Dr. Cecilia Giulivi concerning a selection of brain biomarkers to track skin cancer in mice.
- Worked with large amounts of mice metabolite data and performed multivariate data analysis to reveal statistically significant variables.

Group Research Intern—*UC Irvine Dept. of Chemistry, UC Irvine Dept. of Mathematics*
June 2015—July 2015

- Conducted group research under Dr. Felix Grun and Dr. John Lowengrub concerning cancer cell angiogenesis using mathematical models with MATLAB.

PROJECTS

BearMaps (Java) **April 2018**

- Provided the back end for a Google Maps-like application using Apache Maven and data from the OpenStreetMap Project.
- Included features such as zoom in/zoom out capabilities and finding shortest routes using A* search algorithm.

Build Your Own Game (Java) **Feb 2018—March 2018**

- Formulated a pseudorandom world generation algorithm and implemented playability using keyboard input and mouse hovering. Additional features include saving and loading using Java Serialization.

Scheme Interpreter (Python, Scheme) **Oct 2017—Nov 2017**

- Supported parsing a string of input and evaluating primitive procedures, user-defined procedures, special forms, and recursive programs.