GLENN LEBLANC

530-400-4959 | gleblanc@berkeley.edu | linkedin.com/in/glenn-leblanc | github.com/gl3nnleblanc

EDUCATION

UC Berkeley   **GPA: 3.8/4.0**
BA in Physics and Data Science   *Aug. 2017 – Dec. 2021*
- Relevant coursework: Data Science; Decision Theory; Machine Learning; Software Engineering; Data Structures; Algorithms; Convex Optimization; Probability Theory; Advanced Physics Experimentation Laboratory

EXPERIENCE

Research Internship - Bay Area Neutron Group   Nov. 2020 – Aug. 2021
UC Berkeley   *Berkeley, CA*
- Developed Monte-Carlo fitting routine to solve longstanding (3+ years) problem group had faced concerning biased model fitting using least squares
- Contributed to large-scale C++ data analysis framework to leverage massive datasets for modeling ionization quenching in organic scintillators with full uncertainty quantification

Research Internship - NASA Quantum Artificial Intelligence Laboratory   Jun. 2019 – Aug. 2019
KBR   *Moffett Field, CA*
- Developed Python toolkit for parameterized tensor network contraction to classically evaluate MAX-CUT QAOA expectation values
- Participated in weekly journal club discussing recent developments in quantum computing

TEACHING

Teaching Assistant   Jun. 2020 – Aug. 2020
Berkeley edX   *Berkeley, CA*
- Spearheaded reopening of massive open online course in quantum computing with over 40,000 enrolled students
- Updated course elements to adhere to accessibility requirements
- Assisted students in interactive forum and hosted office hours

Computer Science Mentor   Jan. 2020 – May 2020
UC Berkeley   *Berkeley, CA*
- Taught weekly small group section for data structures course
- Gauged student understanding and directed focus accordingly

Student Instructor   Aug. 2019 – Dec. 2019
UC Berkeley   *Berkeley, CA*
- Developed and facilitated an introductory course in quantum computing to over 15 undergraduates
- Presented weekly lectures and prepared and graded assessments

PROJECTS

Quantum Simulation Playground | *Julia, TravisCI, Git*   Apr. 2021
- Tensor train decomposition for efficient compression of high-rank tensors with applications in condensed matter physics, machine learning
- Supports time-evolving block decimation for exponentially faster simulation of 1D quantum systems

Quantum Partial Search | *Python, Pyquil, Forest API, Git*   Apr. 2019
- Implemented a variation of Grover's algorithm for unstructured search in quadratic time using a quantum processor

Gitlet | *Java, Git*   Dec. 2018
- Architected and implemented a mini version-control system inspired by Git
- Supports branching and merging

TECHNICAL SKILLS

Languages: Java, Python, Julia, C/C++, SQL (Postgres), JavaScript, HTML/CSS, Ruby
Libraries: pandas, NumPy, Matplotlib, Rails
Developer Tools: Git, TravisCI, Vim, IntelliJ