Brian Park

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Education

- **University of California, Berkeley** — Berkeley, CA
  Chemistry B.S. (declared); Computer Science B.A.(intended); GPA: 1.76 — *Class of 2021*
- **Cannon School** — Concord, NC
  High School; GPA: 4.12, Cum Laude — *Class of 2017*

Experience

- **American Chemical Society at Berkeley** — Berkeley, CA
  Event Committee — *August 2018 - May 2019*
  - **Board Member**: Help organize and set up events on UC Berkeley campus that connect students in the College of Chemistry or chemistry related fields and majors.
- **University of North Carolina, Charlotte** — Charlotte, NC
  Lab Intern — *May 2016 - August 2017*
  - **Research**: Worked with graduate students analyzing inorganic chemistry. Research focused on synthesizing N-heterocylcic thione ligands and metal complexes. Presented several group meeting presentations and also helped a graduate student finish and publish his thesis.
  - **SERMACS Presenter**: Presented research at Southeastern Regional Conference of American Chemical Society poster symposium.

Projects

Private repositories avaliable upon request: https://github.com/briancpark

- **Scheme Interpreter**: Coded a functional Scheme interpreter written in Python3. It implements the REPL environment in Scheme.
- **CALChem**: An Android app in Java for a research lab purposes. Keeps track of reaction times and metadata of a reaction. Can store pictures, calculate molecular weights, and percent yield.
- **AI GO for iOS**: Inspired by AlphaGo, AI GO is an iOS app written in Swift that can play a game of Go, an ancient Chinese board game. The app is an application of my studies in computer science, implementing data structures and game trees, while also soon implementing artificial intelligence.
- **Mandelbrot Plot Zoomer**: Made a Mandelbrot plot implemented in C. Also can create individual frames of a movie that can zoom into the plot, creating an infinite fractal.
- **Handwritten Digit Classification**: Implemented a simple neural network in RISC-V ISA to classify handwritten digits.

Related Coursework

* **Chemistry**: General Chemistry and Quantitative Analysis I and II, Organic Chemistry I and II, Introduction to Chemical Process Analysis
* **Computer Science**: Structure and Interpretation of Computer Programs, Data Structures and Coding Methodology, Discrete Mathematics and Probability Theory, Great Ideas in Computer Architecture (Machine Structures), Efficient Algorithms and Intractable Problems
* **Math**: Calculus I and II, Multivariable Calculus, Linear Algebra and Differential Equations
* **Physics**: Physics for Scientists and Engineers I and II

Laboratory Skills

* **Analysis**: ChemDraw, MestreNova, NMR, IR Spectroscopy, Mass Spectroscopy, X-ray Crystallography, Elemental Analysis

Programming Skills

* **Languages**: Python (Expert), Java (Expert), C (Expert), Swift, Scheme, SQL, LaTeX, MATLAB, RISC-V ISA, Mathematica, Dart, HTML, CSS, JavaScript