

**Andrew Cai**  
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## Education

- **Cornell University** Ithaca, NY  
*Bachelor of Science in Electrical and Computer Engineering* Sep. 2019 - May. 2023 (expected)  
*Bachelor of Science in Computer Science* Sep. 2019 - May. 2023 (expected)
  - Dean's List. overall G.P.A.: 3.55
  - Coursework: Computer Architecture, Embedded Systems, Operating Systems, Computer Vision, Data Structures and Functional Programming, Object Oriented Programming, Discrete Structures, Signals.
  - In-progress Courses: ASIC Design, Microelectronics, Probability and Inference.

**Skills:** Verilog, Python, C, Altium, Keras, Java, Ocaml.

## Projects and Extracirricular Activities

**Verilog RISC V CPU**, Collaborated with team to build and benchmark four core RISC V CPU.

**Hilton Hospitality Hackathon 2021**, Worked with team to win best labor solution for idea to attract more part time workers.

**Reddit Shopping Notifier**, Wrote Python script to search for and notify users of new Reddit posts matching user defined keywords. Can be useful for finding specific items for sale in used goods subreddits due to demand and rarity. Incorporated with Heroku and MongoDB.  
<https://github.com/andrewcaiuuu/reddit-email-notifier>

**Chess**, Built Chess in Ocaml with group. Want to work on adding play against computer feature in the future.

## Work Experience

- **Cornell Electric Vehicles** Ithaca, NY  
*Electrical Subteam* September 2019 - Present
  - Worked in student run organization dedicated to building an energy efficient autonomous electric vehicle.
  - Designed Data Acquisition PCB for logging IMU, GPS, and energy consumption onto SD card and sending it over Bluetooth to phone for server upload. Chose and implemented sensors for autonomous system.
  - Collaborated with partner to design Battery Management PCB for monitoring and ensuring battery cell voltage balance.
- **Biological Systems Lab, New Mexico State University** Las Cruces, NM  
*Student Researcher* May 2021 - August 2021
  - Worked as student researcher in Professor Joe Song's lab developing algorithm to find optimal clustering in circular univariate data.
  - Contributed to linear time algorithm for assigning points in circular data to clusters.
- **Mac's Cafe** Ithaca, NY  
*Barista* May 2019 - Feb 2020
  - Prepared and served drinks and food.

## Interests/Skills

**Interests:** Soccer, Photography, Pool, Music, Taking Walks, HiFi Audio Devices, Video Games.

**Skills:** Chinese, Violin, Piano.