Dear Sir or Madame,

Customer-focused professional offering experience in computer programming, data collection, data processing, and analysis, with knowledge in Java and Python.

Bachelor of Computer Science with Honors, Magna Cum Laude
University of Alabama at Birmingham

Birming

May 2018 Birmingham, Alabama

GPA: 3.81

- Collected data using Python, Ruby, and PostgreSQL from Reddit and alternative social media sites, e.g. 4chan, 8chan, Minds.
- Analyzed collected data with Python and Hadoop to find statistical patterns, producing plots to visualize the data using various plots, e.g. CDFs, CCDFs, joint distributions, and basic scatter and line plots.
- Used change point analysis to correlate changes in the patterns of data collected to real-world events.
- Instructed lab sections for both Introduction to Computer Science and Computer Architecture, teaching and assisting a wide variety of students as they learned Python in the introductory course and x86 Assembly in the computer architecture course.
- Graded homework assignments.
- Supervised the programming team, ensuring the quality of code and the delivery of tools for use by the lab's cybercrime analysts.
- Established effective use of version control and documentation practices.
- Conducted programmer interviews and onboarded new team members.
- Created efficient web scrapers to scrape forums in **Python** using packages including *Requests*, *lxml*, aiohttp, AsyncIO, multiprocessing, and Selenium.
- Transitioned web scraping in the lab from pure Selenium to Requests, AsyncIO, and aiohttp to create faster web scrapers.
- Created a web forum database for scrapers in PostgreSQL to replace multiple non-standardized ways
 of storing forum data.
- Set up and maintained a MongoDB instance for collecting a variety of non-standard data collected from the web.