# William Setzer

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### **SUMMARY**

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

## SKILLS AND LANGUAGES

- Strong knowledge of Python
- Strong knowledge of Linux
- Good knowledge of PostgreSQL
- Working knowledge of HTML and JavaScript
- Working knowledge of MongoDB

- Working knowledge of Java
- Working knowledge of Ruby
- Working knowledge of x86 Assembly
- Working knowledge of Scala
- Beginner proficiency in German

### **EDUCATION**

Bachelor of Computer Science with Honors, *Magna Cum Laude* University of Alabama at Birmingham GPA: 3.81

May 2018 Birmingham, Alabama

# WORK EXPERIENCE

#### RESEARCH ASSISTANT

May 2018 - Present

UAB DEPARTMENT OF COMPUTER SCIENCE

- 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.

#### TEACHING ASSISTANT

August 2017 - May 2018

UAB DEPARTMENT OF COMPUTER SCIENCE

- 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.

# Programming Team Lead

DECEMBER 2017 - August 2018

UAB Computer Forensics Research Lab

- 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.

### **PROGRAMMER**

April 2017 – August 2018

UAB Computer Forensics Research Lab

- 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.

BARISTA
STARBUCKS
MAY 2016 – NOVEMBER 2016
BIRMINGHAM, ALABAMA

Cashier

Chick-fil-A

January 2016 – May 2016

Birmingham, Alabama

PROSTHETIC TECHNICIAN

MAY 2015 – JUNE 2015, MAY 2013 – JUNE 2013

ALABAMA ARTIFICIAL LIMB AND ORTHOTICS SERVICE

MONTGOMERY, ALABAMA

Website Product Entry
Beth's Heirloom Sewing

June 2014 – August 2014
Wetumpka, Alabama

## Awards and Leadership

• UAB President's List Spring 2016, Fall 2016, Fall 2017, Spring 2018

• UAB Dean's List Fall 2015, Spring 2017

• UAB Presidential Scholarship Fall 2014 – Spring 2018

• Vermeer Corporation Scholarship 2014, 2016