ANA MACHAIDZE

Philadelphia, PA | anamach@seas.upenn.edu | (215) 594-6283 | github.com/AniMachaidze

Education

University of Pennsylvania, School of Engineering and Applied Science – Philadelphia, PA   May 2022
Bachelor of Science in Engineering, *Computer and Information Science*

Technical Skills and Coursework

Languages and Technologies: Java, C, C++, Python, OCaml, Kotlin, JavaScript, HTML, CSS, Git, GitHub
Upcoming Semester: Operating Systems*(C);* Advanced Programming *(Haskell),* Statistics for Data Science *(Python)*
Past Semesters: Data Structures and Algorithms *(Java)*; Internet and Web Systems *(Java);* Software Design *(Java, JavaScript);* Introduction to Computer Systems *(C);* Market and Social Systems on the Internet *(Java)*; Programming Languages and Techniques *(Java, OCaml)*; Discrete Mathematics; Automata, Computability, and Complexity

Professional Experience

STEP Intern | Google, Inc.   May – Aug 2020
· Created a personal portfolio website using the Google App Engine, Java Servlets, JavaScript, HTML, CSS
· Implemented an event scheduling algorithm that considers attendees' calendars and finds best available times
· Collaborated with 2 other interns to create ResumeBuddy, a web application that connects students to career professionals and provides an effective interface to review resumes
· Designed and implemented the resume commenting feature, a reviewer-reviewee pairing algorithm, object models for keeping application data in the Google Cloud Datastore, and email notifications using Gmail API
· Added integration and unit tests with JUnit and Mockito
· Attended tech and leadership workshops at the Google Women Intern Community (gWIC) summit

CIT 594 Teaching Assistant | University of Pennsylvania – Philadelphia, PA   Jan – May 2020
· Supported teaching a Data Structures and Software Design course with 5 other TAs
· Led weekly recitations and office hours, and graded homework written in Java for 75 students

Residential TA | Engineering Summer Academy at Penn – Philadelphia, PA   July 2019
· Assisted teaching 34 high school students a college-level course in Complex Networks
· Presented crash course lectures for Python, graded homework and held office hours
· Collaborated with 4 other RTAs to organize study sessions and social activities for students

Computer Science Instructor | Penn Alexander School – Philadelphia, PA   Feb – May 2019
· Taught 24 first and second grade students coding in Scratch
· Created and implemented game design lesson plans together with one other Penn student

Projects

Suchmaschine *(Java, Apache Spark, EMR)* | CIS 455 Internet and Web Systems   May 2020
· Created a distributed scalable search engine in a 4-person group
· Implemented a Mercator-style web crawler using Apache Spark which crawled 3 pages per second

Stormlite *(Java)* | CIS 455 Internet and Web Systems   Apr 2020
· Recreated a simplified version of Apache Storm which runs distributively
· Implemented Bolt and Spout Jobs and communication functionality between Master and worker nodes

PennPals *(Java, JavaScript, MongoDB)* | CIS 350 Software Design   Nov 2019
· Collaborated with 3 Students to create PennPals – an Android and web application that connects Penn students to future applicants from underrepresented backgrounds to provide mentorship and guidance
· Designed the registration, profile creation, and authorization features for users on the mobile app
· Implemented admin monitoring, user blocking and deactivating functionality on the web app