Meri Kavtelishvili

merikav@seas.upenn.edu | linkedin.com/in/merikav | github.com/merikav

EDUCATION

University of Pennsylvania, School of Engineering and Applied Science – Philadelphia, PA Expected Dec 2021
B.S.E, M.S.E in *Computer and Information Science* | Minor: Mathematics | GPA: 3.74/4.0

COURSEWORK

Computer Science: Data Structures & Algorithms; Database and Information Systems (graduate level); Scalable and Cloud Computing; Software Design & Engineering; Introduction to Computer Systems; Algorithmic Game Theory; Randomized Algorithms (summer program); Automata, Computability, & Complexity; Market & Social Systems on the Internet
Mathematics: Discrete Mathematics; Statistics - Probability; Linear Algebra; Differential Equations; Calculus III

TECHNICAL SKILLS

- *Proficient*: Java, C, OCaml, JavaScript *Intermediate*: Python, Cypher *Familiar*: Scala
- SQL, MongoDB, Neo4j, AWS, MapReduce, Android Studio, Node.js, Express, React, HTML, CSS, Bootstrap, Git, LaTeX

PROFESSIONAL EXPERIENCE

Distributed Systems Engineering Intern | ActionIQ – New York, NY (Cancelled due to COVID-19) Summer 2020

Software Engineering Intern | InternHacks, URX – Virtual Jun – Aug 2020

- Collaborated in a cross-functional, five-member team to build a web-application that sends users customizable reminders to connect with friends and family, and lets the users track the interaction history with their connections
- Personally designed tech stack, architecture, and the database, used Google authentication API, implemented the RESTful API for the backend, designed and implemented the algorithm for sending reminders by utilizing Node.js, Express, React, and MongoDB
- Won the award for the best architectural design

Teaching Assistant | University of Pennsylvania – Philadelphia, PA Jan 2019 – Aug 2020

- Courses TA-ed: *CIS 502 – Analysis of Algorithms (Graduate level), CIS 320 – Data Structures & Algorithms, MCIT 594 – Data Structures & Software Design, CIS 160 – Discrete Mathematics, Graph Theory*
- Held weekly office hours for 15+ students to help them with HW and answer questions about the course material
- Designed the rubrics and graded exams and homework of 190+ students weekly together with other TAs
- Taught weekly recitations of 15-20 students, and co-designed recitation curriculum

PROJECTS & RESEARCH EXPERIENCE

CollegeBnB | Database and Information Systems class project – Web Application Jan - May 2020

- Collaborated in a team of four to make a web application that helps prospective college students pick colleges based on preferred criteria, and plan their college tour trips
- Designed the database and wrote SQL queries on a database with more than 100k entries, improved query performance by 250%

PennBook | Scalable and Cloud Computing class project – Web Application Sept - Dec 2019

- Collaborated in a team of three to build mini-Facebook - a web app that supports posting, messaging, and connections
- Implemented the Adsorption Algorithm in Hadoop MapReduce to make a friend recommendation system for the app

PennPals | Software Engineering and Design class project – Android & Web Application Sept – Dec 2019

- Built an application in a team of four that connects UPenn applicants from underrepresented communities with current UPenn students
- Implemented friend-connections, friend recommendation system and other related features end to end
- Utilized Java, Android Studio, Node.js, Express, and MongoDB on Atlas

J-Compiler | Computer Systems class project – Compiler in C Nov – Dec 2019

- Wrote a compiler in C that converts code written in a new stack-oriented language, J, into LC4 (Penn's version of LCE) assembly code similar to the way lcc compiler converter converts C code into assembly

Causal Inference and Probabilistic Causal Models | Google CSR Explore Researcher Jan – July 2019

- Researched causal inference and probabilistic causal models to examine Markov Logic Networks (undirected probabilistic graphical models) and their role in prediction making; Advised by Professor Val Tannen