

SAMUEL NASER

SOFTWARE ENGINEER

✉ samuelnaser2020@u.northwestern.edu 🌐 samnaser.com/about 📞 1-502-415-0878 🐙 Monkeyanator

EDUCATION

Northwestern University

BS Computer Science 2020

Relevant coursework: Data Structures and Management, Human Computer Interaction, Introduction to Computer Systems, Introduction to Computer Graphics, Machine Learning: Foundations and Algorithms

Cumulative GPA: 3.88

University of Louisville

BS Computer Science 2017

Relevant coursework: Object Oriented Design with Java, Introduction to Programming Languages (C), Data Science, Calculus II, Calculus III, Differential Equations

Cumulative GPA: 4.0

SKILLS

HIGHLY PROFICIENT IN: Java, Python

PROFICIENT IN: Swift, C, C++, Javascript, HTML, CSS/SCSS, Go

FRAMEWORKS/TOOLS: Django, Xcode, Angular, SQL, Docker, Distributed Systems

RESEARCH & EMPLOYMENT

Google

Software Engineering Intern, Cloud Services Platform, Kubernetes Node Team

Sunnyvale, CA
Sept. 2018 to Dec. 2018

- Leveraged the OpenCensus framework to add distributed tracing to each step in the Kubernetes pod lifecycle, including the container runtime steps; made it possible to visualize these traces in Stackdriver, Zipkin, and various other trace backends; drafted design proposal for adding a distributed tracing model into Kubernetes
- Utilized the custom tracing tooling I authored to debug critical bugs in production GKE clusters

Amino Payments

Software Engineering Intern

Philadelphia, PA
June 2018 to Sept. 2018

- Processed high-throughput (1000+ events per second) advertisement transaction data with Apache Kafka and Apache Samza, reassembled the digital transaction chain in real-time
- Migrated from JSON to redesigned Apache Avro models at each step of our Java backend, reduced the size of our codebase by over 3,000 lines
- Developed and maintained critical Python utilities which transform output from our data pipeline into a format usable by our API, configured CircleCI test environment and wrote integration tests for these utilities

Design, Technology, and Research (DTR) Lab

Undergraduate Researcher

Northwestern University
Jan. 2018 to Current

- Pioneering systems that allow users to contribute to physical tasks, such as picking up packages or delivering food, without disrupting their existing routines
- Leverage Node.js, Swift, and MongoDB to implement an application stack that allows users to post food order requests, and intelligently notifies users passing restaurants to pick up the order if it's conveniently on their route

Knowledge Discovery and Web Mining Lab

Undergraduate Researcher

University of Louisville
Nov. 2016 to Aug. 2017

- Implemented novel recommendation engine with Python and the Django framework that analyzed user news consumption patterns and recommended articles which negated political biases
- Designed and implemented mobile and web interfaces for user studies using Typescript and Angular with the Ionic cross-platform framework to collect data and test models

PROJECTS

Slackdog

June 2018 to Sept. 2018

- Implemented real-time analytics platform for the popular Slack messaging service, leveraged InfluxDB to store time-series data, wrote components in Golang, and the API in Python
- Deployed the application on Google Kubernetes Engine

FareShare

Jan. 2018 to May 2019

- Created application with React frontend and MongoDB / Node.js backend to help users coordinate to split rideshare costs
- Led backend team of 3 developers, designed and implemented an algorithm to match most compatible requesters

The Glass Capitol

June 2016 to Aug. 2017

- Redesigned and implemented the site's user system, handling thousands of new accounts per month. Implemented the site's session management, added social logins
- Loaded legislative data into the site's Google App Engine instance, leveraged Javascript and the d3 library to create interactive data visualizations