

Joonho Ko

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joonho.space
github.com/simpko

Education

Massachusetts Institute of Technology

Cambridge, MA

Candidate for Bachelor of Science in Computer Science – GPA 4.3/5.0

Jun 2020

Relevant coursework: Operating Systems, Computer Systems Engineering, Network and Computer Security, Software Construction, Machine Learning, Design and Analysis of Algorithms, Computation Structures

Experience

GoDaddy

Seattle, WA

Backend Software Engineering Intern

Jun 2019-Aug 2019

- Improved end-to-end testing of user experiences involving our project by allowing partner teams to create mocked responses for our Flask API and save them to AWS S3
- Configured our project's Kubernetes pod logs to send to AWS CloudWatch Logs to be viewable and queriable
- Vastly improved the organization's developer experience by reducing the project build time from ~16 hours to potentially less than 1 hour for most new features

Everbridge

Burlington, MA

Software Engineering Intern

Jun 2018-Dec 2018

- Developed a microservice in Scala to transform ingested risk event feeds from around the globe into a unified data structure to be used by partner teams
- Integrated version control for the documentation of a product by rewriting the documentation in Markdown and writing a script to convert the Markdown into a styled PDF

MIT Research Laboratory for Electronics (RLE)

Cambridge, MA

Undergraduate Researcher – Speech Communication Group

Mar-Aug 2017

- Wrote Python scripts that aligned large datasets of acoustic signals that were essential in determining the p-centers of spoken syllables in prosodic speech
- Discovered the existence of negative mean asynchrony (NMA) and showed that it reflects transit time from the effector organ to the brain, such that NMAs for speech production is shorter than NMAs for finger taps
- Authored an abstract highlighting the research project for the 2018 New England Sequencing and Timing (NEST) meeting

Projects

Siamese – github.com/simpko/typosquat

July 2019

Developed a Flask application that allows users to explore domain names for awareness and potential prevention of typosquatting. Searching a domain name returns a list of visually similar domain names as well as their availability. Awarded People's Choice at GoDaddy's 2019 Intern Week Hackathon.

Soundspace – sound-space.herokuapp.com

January 2019

Developed a web application that explores collaborative music generation in space. Users can fill a space with visuals such as stars, planets, and comets by collaboratively playing musical sounds in real time. Used Node, socket.io, and MongoDB. Awarded 3rd place at MIT's 2019 web.lab web programming competition.

Software/Skills

- **Languages:** Python, JavaScript, Bash, Go, Java, C, HTML, CSS, Scala, SQL, C#
- **Software, Frameworks, Tools:** AWS, Flask, Git, Jenkins, Node, Docker, Kubernetes, Vim, React, MongoDB, Apache Hive, Maven, Spring
- **(Human) Languages:** Fluent in Korean and Japanese, basic level of Chinese and French