SEAN KIM

714-501-6468
seanhkim127@gmail.com
2111 E Pine St
Seattle, WA 98122
https://hngmn.github.io/
github.com/hngmn
linkedin.com/in/hngmn

Coursework (In order)

- Operating Systems
- Algorithms
- Computer Networking
- Databases
- Network Security
- Computer Architecture
- Artificial Intelligence
- Programming Languages
- Formal Languages & Automata
- Compilers

Languages (Best first)

Java, C/C++, Python, Ocaml, Javascript, Common Lisp, SQL

Tools

git, Intellij, JProfiler, Visual Studio, Eclipse+MemoryAnalyzer

Interests

volleyball, bikes (repairing/building/riding), hiking, reading, baking, guitar, painting

Education

UCLA, *B.S. Computer Science* *Jun 2018*

Professional Experience

Amazon - AWS Support, *Software Dev Engineer* *Sep 2018 - Mar 2021*

Internal full-stack service providing an AWS API proxy functionality with builtin security and tool-building platform. Global availability, regional fault-tolerance, used by 10K+ support engineers across AWS for providing external AWS customer support and analytics.

- Rails frontend, Java backend
- Designed and built a new full-stack application for automation and orchestration of a business-critical manual process. React frontend, AWS Lambda+DynamoDB backend.
- Analyzed noisy-neighbor issue and implemented throttling solution

Amazon - AWS Builder Tools, *SDE Intern* *Sep 2017 - Jun 2017*

Internal service fronting a terabyte-scale DynamoDB graph database with gigabyte-scale query result sets.

- Intern Project: Designed+implemented path recording in graph traversal queries.
- Re-engineered BFS traversal mechanism for +15% throughput

NESL at UCLA, *Research Assistant* *Jun 2016 - Apr 2017*

Project Roseline, a custom Linux stack/kernel module (plus user-level applications) providing precision time-synchronization on low-power, networked embedded systems.

- Implemented distributed coordination algorithm using Opensplice's DDS API
- Kernel driver for radio module to enable *ns*-scale hardware time-stamping

Software Projects

Musical Instruments as Code (WIP) – React/Redux/TypeScript – Personal
https://hngmn.github.io/things/stepsequencer
Musical instrument building tools with a drum looper/sequencer for playback

TCP Subset, *C++ — CS 118: Networking Fundamentals*
Reliable data transfer and congestion control over UDP.

MiniJava Compiler, *Java — CS 132: Compilers*
Java-subset Lexer+Parser+Typechecker+Assembler using the Visitor pattern.

Arduino Temp+Humidity Monitor, *C — Personal*
Data collection/visualization using Arduino+peripherals while proofing bread dough.

Regular Expression Matcher Generator, *OCaml — Personal*
Matchers for a subset of regular expressions over bit-strings.

Miscellaneous

Read/OC Jr. *Sep 2013 - Jun 2014*
Tutored young (3rd-5th grade) ESL (from Korea) students in English and other homework from school to help them succeed.