Arash Nabili

23214 Orange Ave Apt 9 • Lake Forest, CA 92630 • (714) 916-7043 • arash.nabili@gmail.com
arashnabili.com

Skills

- Programming skills: Java, C/C++, Android, Python, Web (HTML, CSS, JavaScript, React JS, Node.js)
- Proficient in designing and building full-stack applications
- Experience with Linux shell scripting, build systems (Make, Maven, sbt), and Jenkins CI

Education

University of California, Irvine — Irvine, California

Doctor of Philosophy, Computer Science — Graduation: June 2021
Teaching Assistant, 5 quarters — Fall 2016 – Spring 2018
Graduate Student Researcher — September 2017 – December 2017

Master of Science, Computer Science — Completed: June 2018

Bachelor of Science, Computer Science and Engineering — Graduation: June 2016
GPA: 3.896, Dean's Honors List for 8 quarters

Projects

DPRT

- Designed and built a cross-platform application for managing car dealer plates, recording test drive information, and generating reports of test drives
- Application components include: an API backend built using Node.js, running in Google App Engine and leveraging Firebase for authentication and user management; a web application using the Firebase Web client and the API backend for managing users and plates; and Android and iOS apps using the Firebase client SDKs for capturing test drive information.

Senior Design Project

- Designed, developed, and tested server and mobile applications for an autonomous drone system
- Collaborated with team members to integrate server and mobile app with other components

Embedded Systems Final Project

- Designed a tool for reading vehicle diagnostics information, using an ATmega32 microcontroller
- Implemented the OBD-II protocol through embedded software, leveraging the microcontroller's UART interface to communicate with a vehicle's on-board diagnostic system.

AI Class Project

- Designed the AI for the game Connect-K in Java
- Employed the minimax algorithm in conjunction with a heuristic evaluation function to determine the optimal move for any board state, as well as Alpha-Beta pruning to increase the performance of the AI.
- The data structure used was a game tree, where a node contained a board state, and each node's children were the possible moves from that node. A Comparator was used to order the nodes.

Digital Design Final Project

- Implemented a 32-bit processor in VHDL. The design consisted of a controller, a register file, a 32-bit ALU, ROM, sign extender, multiplexers, and a program counter.

Work Experience

Associate Engineer – Satellite Development June 2018 – September 2018
SpaceX

- Built a web portal for visualizing QIP (Quality of IP) statistics (code coverage, regression test results, JIRA issues, code check-ins)
- Developed new C/C++ test suites for modem running on FPGA

Software Development Engineering Intern June 2017 – September 2017
Amazon.com, Inc.

- Designed and implemented a web-based tool to manage automatic app entitlements for the ADG (Amazon Digital Goods) team

Lead Android Developer October 2016 – January 2018
Radio Javan, Inc.

- Overhauled the Radio Javan Android app to use a standard app architecture as well as a standards-compliant UI design.

Software Engineer April 2015 – August 2016
Levyx, Inc. Irvine, California

- Educated other interns on Apache Spark's functionality and internals
- Developed a suite of tests to evaluate Apache Spark's performance
- Maintained and contributed to company's software products

Consultant June 2014 – April 2015
University of California, Riverside Riverside, California

- Developed interactive JavaScript tools for the zyBooks online learning content
- Revised course books for programming languages such as C, C++, and Java