# NATHAN HOANG

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# **EDUCATION**

# **University of Texas**

Austin, TX

BS in Computer Science May 2021 Certificate in Applied Statistical Modeling

**GPA: 3.92** 

# SKILLS

C • Python • Java • Typescript React • Redux • Express • NodeJS Azure • Spark • Bash PowerShell • ROS • Hadoop Scala • C++ • SQL • Git • Unity

# COURSEWORK

Operating Systems
Algorithms
Computer Architecture
Compilers
Discrete Mathematics
Software Engineering
Linear Algebra

# ACTIVITIES AND HONORS

## **Competitive Programming**

Regularly compete in competitive programming competitions | 2017 – Present

### **College Scholar**

Top 20% of college | 2019

#### **Varsity Tutors**

Professional tutor for AP Computer Science | 2019

# LINKS

GitHub github.com/nathanhoang5 LinkedIn linkedin.com/in/nathanhoang5

# **EXPERIENCE**

#### WP ENGINE

Software Engineering Intern | Summer 2019

- Enhanced error diagnosis and facilitated customer transparency using React/Redux/Typescript frontend and Node/Express backend to develop dashboard that allows for analysis and visualization of site metrics
- Developed responsive React components for library used in production signup and payments page
- Implemented extensive features including routing, custom graph filtering and data selection, custom date ranges, and lookup

#### ADVANCED MICRO DEVICES, INC.

Data Engineering Intern | Summer 2018

- Improved efficiency of processing and querying large logfiles by engineering data pipeline on distributed system using Scala, Hadoop and Spark MapReduce
- Decreased time to replicate and manage replications of virtual machines to Azure by 95% using Azure PowerShell cmdlets and Zerto API

#### RADIONAVIGATION LAB AT UT AUSTIN

Research Assistant | Summer 2016 and Summer 2017

- Implemented a real-time probabilistic path-planning service for quadcopter in C++
- Automated simultaneous localization and 3-D mapping in a quadcopter simulation environment

# **PROJECTS**

#### MENTOR ME | Company Hackathon, 2019 | Won two awards

- Worked with team of three software engineers to create a mentor/mentee matching application
- Wrote serverless backend using Firebase functions and Firestore (NoSQL database), and connected React frontend to API

#### **DAIMLER VOICE ASSIST** | Daimler Trucks Hackathon, 2019

- Voice controlled React application to allow truck repairmen to perform hands-free truck diagnostic and repair
- Integrated speech recognition and NLP libraries and opened socket connection between Python node and React frontend

#### **DEEP LEARNING WITH OPENAI GYM** | Personal Project, 2019

 Wrote Python Deep Q-Learning algorithm using only numpy library to solve classical deep learning problems

#### PASCAL COMPILER | Class Project, 2019

• Wrote a Pascal compiler and assembler using Yacc and C