# Nathan Wang

nywang08@gmail.com | 484-755-8771 | Redmond, WA | linkedIn/nathanwang-gt | github/Nathan-Wang-GT | nathan-wang-gt.github.io

## **EDUCATION**

## **Georgia Institute of Technology**

Atlanta, GA | May 2023

M.S. Computer Engineering

**GPA:** 3.88/4.00

**Teaching Assistant:** Advanced Programming Techniques

#### B.S. COMPUTER ENGINEERING WITH MINOR IN ARTIFICIAL INTELLIGENCE

May 2022

GPA: 3.88/4.00

Teaching Assistant: Digital Systems Design, Programming with Hardware and Software Systems, Engineering Software Design

## **WORK EXPERIENCE**

#### **ASCENTTA** | IT SPECIALIST

Remote | July 2023 - Present

• Designed and developed a specification package using a **Python GUI** to support the sales team in their automation process.

#### T-MOBILE | DEVOPS INTERN

Bellevue, WA | May 2022 - Aug 2022

- Composed and implemented a dashboard using **ElasticSearch** and **Kibana** to visualize data produced by logs in real time using **Logstash**, increasing the transparency and response time to errors and failures.
- Created an alert system using **Grafana** to notify users of issues with databases at real time.
- Performed unit testing on developed dashboard, which led to the system being pushed to Production.

#### **CARMAX, INC.** | Systems Integration Intern

Remote | Jun 2021 - Aug 2021

- Built a resilient, end-to-end data analysis dashboard using **React.js** to analyze individual payment statuses of customers, increasing status lookup time.
- Implemented the backend for the dashboard using **C#** to process data from Azure Database.
- Set up a CI/CD pipeline on **Azure** and passed unit tests for each stage, which resulted in the dashboard being pushed to Production.

#### **BIOTELEMETRY, INC.** | DATA SCIENCE INTERN

Remote | Jul 2020 - Dec 2020

- Developed a EKG detection system in **Python** to help identify anomalies in heartbeat data from patients to help detect early heart conditions.
- Applied DSP techniques such as FFT and algorithms to improve overall runtime speed.

## **PROJECTS**

#### **CARMAX INNOVATION GARAGE**

PUPPETEER, C#, AZURE

A web crawler chrome extension designed to scrape data off of competitor websites and create a comparison between prices of products of similar or same specifications. Created an Azure Pipeline to maintain the extension.

#### NSA CODEBREAKER 2022 ☐

CYBERSECURITY, WIRESHARK, GHIDRA, WEB ANALYSIS, LOG ANALYSIS

Competed in the annual malware competition hosted by the NSA. Applied malware concepts to solve simulated challenges. Georgia Tech as a team scored first out of all competing universities.

#### DIABETIC RETINOPATHY SEVERITY ML CLASSIFIER

PYTHON, ML, GOOGLE COLAB, TENSORFLOW

A detector trained through different classification methods (K-Means, Gaussian Mixture Models, K-Nearest Neighbors, Convolutional Neural Networks) to identify the severity of a patient's diabetiic retinopathy.

#### HOT SPOT MOBILITY MODEL

C/C++, NETWORKS, NS3

An implementation of the simplified version of the Hot Spot Mobility Model on ns3 version 3.37. The model is built for 2D simulations and chooses waypoints off the straight-line path between the current location and destination node.

## SKILLS

Languages: Python, C++/C#, C, Java, Matlab, Linux, SQL, JavaScript, HTML/CSS, LATEX

Software: React, Node, Git/Github, IDA Pro, Docker, Power BI, Grafana, Jupyter Notebook, AWS, Azure

Hardware: Raspberry Pi, mBed, Arduino

Soft Skills: Teaching, Communication, Intrapreneurship