**­­Edu­­­­cation­­­­**

**Honors B.S. in Computer Science**, Expected Graduation 2020

The University of Texas at Dallas

**GPA: 3.95/4.0** ­- Dean’s List Fall 2017, Spring 2018

**Languages & Tools**

* Java (6 years): 2D game development, threading, network sockets, graphics, text manipulation, OOP
* C++ (2 years): OOP, lambda expressions, pointers/references, memory cache hits/misses
* Python (2 years): scripting, OpenCV, Keras, Tensorflow
* Node.js (1 year): Express framework, asset request routing, HTTP requests, API design, Web3.js
* Git (3 years): used for 10+ projects, branching, merging, reverting, GitHub/GitLab

**Professional Experience**

**Intel Corporation**, Undergraduate Technical Intern June ‘18 – Present

* Wrote an automated script to clean and link over 200,000 lines of CSV position data with a raw HTML data file, extracting and summarizing over 10 relevant features
* Built various Java, R, and Python heatmap visualizations for the position data read from the CSV file
* Designed a Python framework to optimize camera rotation angles for pixel quality in Maya CAD models
* Realized 7x speedups in the optimization framework by implementing a simple data caching mechanism to prevent redundant matrix computation
* Wrote and tested a lightweight 4D linear algebra library to simulate view model transforms and camera projections
* Massively cut optimization runtimes by a factor of 400 by designing a novel, standalone C++ command line executable to replace an existing Maya plugin (from 191 to .387 seconds)
* Currently developing a pipeline to automate data cleaning, data input, external optimization, and data output
* Continually communicated with the relevant Intel team to clarify project asks and specifications in order to ensure development continued to solve the problem at hand

**Valencian Digital**, Backend Architect & DeveloperMay – October ‘18

* Designed the Node.js server architecture, NoSQL Firestore database structure, and client-server communication schema for RotoHive, a crypto-based fantasy football website hosted with Google Cloud Platform
* Wrote abstraction layers to easily interface with the Firestore database and the Ethereum blockchain network by wrapping Web3.js with higher level promise-based functions
* Designed and tested event listeners to drive autonomous server functions like rewards handling, blockchain tournament creation and termination, fantasy performance evaluation, and database state management
* Meet weekly with colleagues to discuss recent progress and relevant tasks, and held individual meetings to sort communication schema
* Delivered on a short timeline and thrifty budget compared against comparable full-stack web applications
* Currently handling dozens of people and hundreds of ERC20 token transactions on a weekly basis
* Publicly hosted at <https://www.rotohive.com>

**Texas Analog Center of Excellence**, Machine Learning Research Intern January ’18 - Present

* Wrote a Python script to alert researchers by sounding and alarm and attempt reconnection when the time-of-flight camera disconnected, preventing the loss of hours of data
* Cleaned multiple gigabytes of raw video data, matching video frames to driver gazes at various markers and providing accurate training data for the machine learning model
* Worked with Texas Instruments engineers to understand and implement proprietary TI hardware to manage camera sensor data

**Software Projects**

[**American Sign Language to English Translation**](https://github.com/Abhishaike/ASL_Translation) January – April ‘18

Computer Vision & Machine Learning Research

* Collaborated in a team of 5 to develop a full-stack application that analyzes a webcam stream to extract American Sign Language symbols and translate them to the English alphabet using Python with OpenCV and Keras
* Tested and evaluated different features extraction pathways including real-time contour segmentation and foreground/background recognition using OpenCV
* Designed the final project architecture and data flow between the convolutional neural networks and the Django/Flask front-end webpage

[**Engineering Projects in Community Service**](https://github.com/AneeshSaripalli/EPICS-2100-Project) January – October ‘18

Project Leader, React Native Developer, Backend & Database Architect

* Designed and implemented the first draft of a cross-platform mobile application to reduce wait times and streamline the appointment registration process for a 501(c)(3) using React-Native, MySQL, and PHP
* Wrote a PHP backend server to allow users to sign up for appointments in the MySQL DB, preventing double-booking

**Activities & Clubs**

Dallas Blockchain Club Vice President:Designed flyers for club events.Communicated with other clubs including the entrepreneurship club and ACM to host joint technology events. Presented a workshop on using the Web3 - Python interface

HackUTD Industry Coordinator**:** Actively communicated with industry contacts to raise $5,000 for HackUTD Spring ‘19

AI Society Technology Coordinator:Working with other officers to arrange workshop events on logistic regression, decision trees, and KNNs

**Honors**

Erik Jonsson Engineering Scholarship:Awarded twice after a holistic review consideration including academic merit

Mustang Technology Scholarship:Award due to academic merit

Phi Kappa Phi Honors Society:Maintained a GPA in the top 10 percentile among those with junior standing

Computing Scholars Honors Society:Selective honors that only accepts 30 CS students in each cohort

**Awards**

UIL Regionals Qualifiers:Placed in the top 15 in the region in Computer Science, Mental Math, and Math after placing 2nd, 2nd, and 3rd, respectively, in districts

1st place at UTD Hacks for Humanity:Designed an elegant social good app using React Native that allows people to rate locations based on accessibility to those with disabilities – comparable to a Yelp specifically for accessibility.Uses Google Maps API to display the map and Google Firebase to store the reviews and ratings.

2nd place at T-Mobile Hacktober:Developed a novel application that automatically summarizes conversations between customer service agents and customers using Google NLP and IBM Bluemix and stores them in Google Firebase**.** Integrated retrieval functionality that allows any agents to retrieve these summaries when the customer calls again, preventing the need for the customer to repeat themselves for every representative.

3rd place at Johns Hopkins’ HopHacks:Built a social good app using React Native that allows communities to help themselves after natural disasters by allowing those less affected to offer available goods and donations, while allowing those more affected by the disaster to easily search for donations via keywords