# ohur Ali

**J** 425-770-0031 **☑** gohurali@live.com

in linkedin.com/in/gohurali github.com/gohurali gohurali.github.io

#### Education

## University of Texas at Austin

Sept. 2021 - June 2023

Master of Science (M.S.) in Computer Science | GPA: 3.71

• Coursework: Deep Learning, Optimization, Natural Language Processing

#### University of Washington

Sept. 2016 - Apr. 2020

Bachelor of Science (B.S.) in Computer Science | GPA: 3.73

• Coursework: Computer Vision, Cloud Computing, Linear Algebra, Operating Systems, Hardware, Database Systems, Data Structures & Algorithms, Software Engineering, Machine Learning, Statistics for Machine and Deep Learning

### Experience

Blue Origin Jan. 2022 -

Software Engineer - Frontend

Seattle, WA

- Implemented a data archival UI capable of processing terabytes of timeseries data in React and TypeScript
- Integrated React Query and Redux to ensure client side and API state is maintained across the application and minimized state props by 75% within the codebase
- Improved maintainability by abstracting components to allow reusability with strong TypeScript typings
- Wrote unit, integration, and end-to-end tests in Jest for components to ensure reliability

#### Intel Corporation | Tata Consultancy Services

Mar. 2021 – Dec. 2021

Software Engineer - Full Stack

Seattle, WA

- Designed responsive and dynamic user interfaces with Angular and TypeScript from the ground up
- Developed backend REST APIs with Express for authentication and storage using MongoDB and Passport
- Collaborated and communicated with team on features and components to ensure quality was maintained

AVA Retail.ai Sept. 2018 – Feb. 2019

Software Engineering Intern - Machine Learning

Redmond, WA

- Developed an automated image generator using Python & Blender that generated over 5000 unique images per day
- Trained a convolutional neural network (CNN) for object detection in TensorFlow using generated data, which is used by clients such as Microsoft, Walmart, and Starbucks
- Worked closely with QA team to discover and resolve software defects with test-driven development

#### Research

# University of Washington Bothell Dept. of Computer Science

Sept. 2018 - Mar. 2019

Undergraduate Researcher | Advisors: Dr. Diala Ezzeddine & Dr. Arkady Retik

- Designed a NLP pipeline to match job applicants to jobs based on qualifications
- Developed a novel shallow 1-D CNN architecture in TensorFlow & Keras for sentence classification with pre-trained embeddings which competes with deeper architectures based on standard datasets (97% accuracy)

#### Projects

QuickBnB | React, Next.js, Redux, TypeScript, TailwindCSS, MongoDB, Redis, Passport.js

- Developed a website platform in React and JavaScript for users to host and book living spaces
- Designed a robust REST API in Node.js & Express to handle profiles, messages, and living space postings
- Built user authentication with Passport.js including integration with Google & Facebook

YOLOv2 Object Detection | Python, PyTorch, NumPy, OpenCV, Jupyter

- Developed an object detection pipeline from scratch in PyTorch to detect and classify trained objects in images
- Implemented K-Means clustering to generate K average size anchor bounding boxes found in the dataset
- Implemented a variant from the originally proposed loss function to support any number of anchor boxes

Lane & Vehicle Detection  $\mid C++, Python, OpenCV, Jupyter$ 

- Calculated Hough transform lines for lanes using ROI, edge detection, and color spacing techniques in C++ & OpenCV
- Trained a SVM model for classification on open source datasets for vehicles and non-vehicles at a 96% accuracy
- Used pyramid scaling sliding window to obtain bounding boxes with non-max suppression to detect vehicles

#### Technical Skills

Languages: Python, Java, C++, C#, JavaScript, TypeScript, GoLang, R, Bash

Technologies/Frameworks: TensorFlow/Keras, PyTorch, OpenCV, Scikit-Learn, Pandas, .NET, Linux, AWS, Azure,

MongoDB, Express.js, Angular, React, Node.js, GraphQL, Docker