

JAYITA MALIK

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EDUCATION

The University of Texas at Dallas

Aug. 2019 — May 2023

Bachelor of Science, Computer Science

GPA: 3.8/4.0

- UTD Academic Excellence Scholarship (full tuition + stipend), School of Engineering Dean's List, Harvard College Undergraduate Research Association's National Collegiate Research Conference attendee
- Coursework: Data Structures and Algorithms, Probability and Statistics, C/C++ Programming in UNIX, Computer Architecture, Linear Algebra, Discrete Math I & II
- Activities: Artificial Intelligence Society, Society of Women Engineers, Engineers Without Borders

TECHNICAL SKILLS

Languages: Java, C++, C, SQL, Bash, Python, JavaScript, HTML/CSS, R

Developer Tools: React, React Native, Linux, Node.js, Git, Google Cloud, Tensorflow, Agile, Object-Oriented Design

EXPERIENCE

Advanced Networks Research Lab

April 2021 – Present

Undergraduate Research Intern

Dallas, TX

- Solved constrained optimization problem for revenue maximization using Neural Networks
- Developed optimal 5G Network slicing models using Deep Learning to maximize revenue for providers and motivate users to purchase network slices
- Assessed and maintained the Neural Network models under the supervision of Prof. Jason Jue

The NorthCap University

March 2020 – August 2020

Student Researcher

New Delhi, IND

- Researched and developed a C++ based IoT system to analyze human brainwaves for quantitative human psychology analysis under Prof. Naresh Kumari
- Publication in the International Journal of Advance Research and Innovation (ISSN: 2347 - 3258)

PROJECTS

Weather to Wear? | *Clothing Recommendation App*

GitHub | May 2021

- Developed a full-stack web application that suggests weather-appropriate outfits for the day for any location from the user's own personal inventory, used Google's Cloud Vision AI to detect logos on branded clothing
- Technologies Used: React, Firebase, JavaScript, HTML, CSS, HTTP, Google Vision AI

TrackATruck | *Geo-fencing enabled truck monitoring and tracking system*

GitHub | May 2021

- Built a full-stack web application using relational database system to monitor real-time performance parameters such as engine heat, speed, fuel, ignition status and geo-location and alerts anomalies
- Technologies Used: Node RED, Node.js, MySQL, JavaScript, Grafana, HTML, CSS

I'm So Hungry | *Reverse Recipe Search App*

GitHub | March 2021

- Created a mobile application that uses APIs to generate recipes from already available ingredients in the user's pantry, app is particularly useful in COVID-19 lockdowns
- Technologies Used: React Native, Axios, HTTP, JavaScript, HTML/DOM, CSS

JayShell | *Custom built Linux shell from scratch*

GitHub | December 2020

- Developed a custom Linux shell using C and Linux System Calls like fork, exec, pipe and dup2. Shell capable of processing both Linux and Windows commands, including pipes and re-direction of I/O
- Technologies Used: C, Linux, make, Signal Handling

Garbage Classifier | *Neural Network enabled Garbage Classifier*

GitHub | October 2020

- Collaborated on a Machine Learning classification model that categorizes images of garbage into 6 categories and determines whether they are recyclable
- Technologies Used: Tensorflow, Python, Keras, OpenCV, Javascript, HTML/CSS