

## EDUCATION AND CERTIFICATIONS

<b>Richardson, Texas</b>	<b>University of Texas at Dallas</b>	<b>August 2020 – May 2025</b>
<ul style="list-style-type: none"><li>M.S. in Computer Engineering – Applied Machine Learning (Fast Track Admit)</li><li>B.S in Computer Engineering – Dean’s List, Spring 2021 – Spring 2022</li></ul>		GPA: 3.81 May 2024
<b>Certifications</b>		
<ul style="list-style-type: none"><li>Agile Foundations Class (AFC-AICI) Certified by Agile International Coaching Institute</li><li>Midas Safety Platform Certified by Cadence</li><li>Design for Test Fundamentals v4.0 Certified by Cadence</li><li>Cloud Practitioner Certified by Amazon Web Services</li></ul>		July 2023 November 2023 November 2023 December 2023

## SKILLS

<b>Languages</b>	Java, JavaScript/HTML/CSS, Typescript, Python, C/C++, GraphQL
<b>Frameworks and Libraries</b>	React.js, React Native, Node.js, Redux
<b>Tools</b>	Git, AWS (Amplify, DynamoDB, CloudFormation and more), Azure DevOps, CI/CD, JIRA

## EMPLOYMENT

<b>Software Engineer, Intern</b>	<b>Southern Glazer’s Wine &amp; Spirits – Richardson, TX</b>	<b>Summer 2023</b>
<ul style="list-style-type: none"><li>Successfully earned the <b>AFC-AICI certification</b>, showcasing proficiency in Agile Methodology.</li><li>Played an active role in 4 development cycles between inception and release and collaborated in 2 impactful demos, gaining valuable insights into the life cycle of front-end components using <b>Salesforce</b>.</li><li>Effectively utilized sandbox environments for precise debugging, identifying, resolving 15+ issues via regression, API and validation testing in <b>Tosca</b> and <b>Jenkins</b> platforms.</li><li>Conducted thorough research and consolidated 3 use cases for <b>Sentiment Analysis</b>, outlining the implementation of a system for elevated marketing through demographic clustering and 80% swifter resolution of system-wide challenges.</li></ul>		
<b>Co-Founder, Software Engineer</b>	<b>Hidden Gems</b>	<b>Fall 2022 - Present</b>
<ul style="list-style-type: none"><li>Collaborated with a team of 5 to develop a <b>Typescript</b> and <b>React Native</b> Mobile App featuring an intuitive interface utilizing Figma, AWS Services, StyleSheet, Redux, Web DevTools, and other external libraries.</li><li>Led a team in a <b>scrum-based sprint</b> cycle to implement a search bar feature with Redux via <b>REST API</b>, enhancing user convenience and reducing data retrieval times by 80%.</li><li>Expanded app capabilities for corporate clients by enabling catering menu queries and user order creation, utilizing <b>Redux</b> and <b>Amplify Datastore</b>. This enhancement led to a 30% increase in corporate user adoption.</li></ul>		

## PROJECTS

### Motherboard Identification

#### UTDesign Expo 1<sup>st</sup> Place

- Designed and developed an automated motherboard identification program with a 7-person team by utilizing YOLO v8, Pylibdmtx, and **Tesseract OCR**, ensuring accuracy and efficiency.
- Implemented text with image preprocessing via **OpenCV** and Tesseract OCR and barcode recognition utilizing Pylibdmtx to process and decode 2D Data Matrices, improving accuracy to 100%.
- Led the integration of Object and Barcode Recognition integration with mount-camera deployment, ensuring project efficiency and timeliness.

## Breast Research Cancer Chatbot

*Sponsored by Dr. Lakshman Tamil*

- Designed and developed a chat-bot web app utilizing **React.js** and **JavaScript** for the user interface, seamlessly integrating a custom knowledge base.
- Incorporated **FastAPI** to establish communication between local knowledge base and **ChatGPT model** via the **OpenAI** API.
- Capitalized **Boto3** to facilitate the upload of user audio inputs to **AWS Transcribe**, allowing voice-based chatbot interactions. Streamlined backend processes via **AWS Lambda functions**.

## LEADERSHIP

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<b>Richardson, TX</b>	<b>Tau Beta Pi, Engineering Honor Society</b>	<b>Spring 2022 - Present</b>
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*Vice President*

- Selected as among the top eight of my year ad major department (ECS) for acceptance into the organization.
- Led 5 officers to organize and execute events, boosting engagement among 40+ members.
- Increased event participation, leading to a substantial rise in attendance and engagement.

*Recording Secretary*

- Managed recruitment and selection, ensuring consistent criteria application and diverse member invitations.
- Represented the chapter at the Tau Beta Pi District Conference, contributing to leadership discussions and officer training.

<b>Richardson, TX</b>	<b>Institute of Electrical and Electronics Engineers at UTD</b>	<b>Spring 2022 - Present</b>
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*Technical Director of the Forge*

- Established an organizational structure for the Forge, fostering a culture of innovation and empowering students to develop and execute technical initiatives that align with the IEEE mission.
- Supervised a team of project managers, providing direction and guidance to ensure timely and high-quality program delivery, while monitoring progress and addressing issues as needed.
- Facilitated communication and collaboration among program managers, faculty advisors, sponsors, and technical experts, promoting seamless execution of undertaking and achieving goals.

*Forge Computer Engineering Project Manager*

- Led **"Facial Security System IOT Project"**: Designed a microcontroller IOT utilizing Breadboard, TinkerCAD. Developed a Facial Security System based on Magic Mirror library, Raspberry Pi, and Camera Module.
- Led **"Arduino Robotic Arm Project"**: Designed a microcontroller IOT utilizing Breadboard and VEX parts. Developed a robotic arm using C++, Arduino Mega 2650, HC-05 Bluetooth Module, and Android Joystick.

*Project Team Member*

- Collaborated on the front-end web development design for the IEEE division at the University of Texas Dallas using HTML, JavaScript, and Svelte to implement Parallax, Slideshows, and Bootstrap navigation bars.

## ADDITIONAL INFORMATION

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<b>Languages</b>	English, Conversational Nepali, Conversational Hindi
<b>Work Eligibility</b>	Eligible to work in the U.S. with no restrictions