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# BHABISHYA SHRESTHA

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#### **EDUCATION AND CERTIFICATIONS**

Richardson, Texas	University of Texas at Dallas	August 2020 – May 2025
<ul> <li>M.S. in Computer Engineering – Applied Machine Learning (Fast Track</li> </ul>		GPA: 3.81
Admit)		May 2024
<ul> <li>B.S in Computer Engineering – Dean's List, Spring 2021 – Spring 2022</li> </ul>		
Certifications		
<ul> <li>Agile Foundations Class (AFC-A</li> </ul>	IICI) Certified by Agile International Coaching	July 2023
Institute		November 2023
<ul> <li>Midas Safety Platform Certified</li> </ul>	d by Cadence	November 2023
<ul> <li>Design for Test Fundamentals</li> </ul>	v4.0 Certified by Cadence	December 2023

## SKILLS

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

### **EMPLOYMENT**

## Software Engineer, Intern Southern Glazer's Wine & Spirits – Richardson, TX Summer 2023

- Successfully earned the AFC-AICI certification, showcasing proficiency in Agile Methodology.
- 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 **Salesforce**.
- Effectively utilized sandbox environments for precise debugging, identifying, resolving 15+ issues via regression, API and validation testing in **Tosca** and **Jenkins** platforms.
- Conducted thorough research and consolidated 3 use cases for Sentiment Analysis, outlining the
  implementation of a system for elevated marketing through demographic clustering and 80% swifter
  resolution of system-wide challenges.

#### Co-Founder, Software Engineer

Cloud Practitioner Certified by Amazon Web Services

#### **Hidden Gems**

Fall 2022 - Present

- Collaborated with a team of 5 to develop a Typescript and React Native Mobile App featuring an intuitive interface utilizing Figma, AWS Services, StyleSheet, Redux, Web DevTools, and other external libraries.
- Led a team in a **scrum-based sprint** cycle to implement a search bar feature with Redux via **REST API**, enhancing user convenience and reducing data retrieval times by 80%.
- Expanded app capabilities for corporate clients by enabling catering menu queries and user order creation, utilizing **Redux** and **Amplify Datastore**. This enhancement led to a 30% increase in corporate user adoption.

#### **PROJECTS**

### **Motherboard Identification**

UTDesign Expo 1st 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 Tessaract 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**

#### Richardson, TX

Tau Beta Pi, Engineering Honor Society

Spring 2022 - Present

#### 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.

## Richardson, TX Institute of Electrical and Electronics Engineers at UTD Spring 2022 – Spring 2023

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-quaity 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**

**Languages** English, Conversational Nepali, Conversational Hindi **Work Eligibility** Eligible to work in the U.S. with no restrictions