paARCHIT BUBBER

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EDUCATION

Arizona State University (ASU), USA **Aug 2025 - Dec 2026**
Masters of Science in Computer Science & Artificial Intelligence
Courses: Statistical Machine Learning, Agentic AI, Deep Learning, Distributed and Parallel Systems, Data processing at scale

M S Ramaiah Institute of Technology, Bengaluru, India **Jul 2022**
Bachelor of Engineering in Computer Science
Relevant courses: Algorithms and Data Structures, Object-Oriented Programming, Database Management Systems

ACADEMIC PROJECTS AND PAPERS

Research - Step-Level Confidence Estimation for LLM Agents - ***Mentored by Dr. Hua Wei***

- Working on the adaptation of Stepwise Confidence Attribution from reasoning problems to tool-using LLM agents, aiming to identify the first failure-causing step and enable targeted self-correction.
- Applying training-free NIBS to compare tool calls, arguments, observations, and responses against consensus patterns across successful trajectories; assigning step-level reliability scores using final task outcomes and evaluating whether low-confidence steps accurately localize errors and guide agents to revise execution from the failure point.

The Strategist - ***Mentored by Dr. Chris Bryan | React, Java (Spring), Python, Machine Learning, Netlify*** *(In Progress)*

- Developing a Monopoly-inspired strategy game as part of academic research, with a focus on designing a real-time ML-based prediction module to forecast player outcomes using large-scale game simulations.

Indian Sign Language to Text Converter | Python, OpenCV, TensorFlow, Flask

- Devised an ISL (Indian Sign Language) to Text converter application with Python, OpenCV, TensorFlow, etc. to facilitate communication for hearing-impaired individuals by translating ISL gestures into textual form.
- Implemented image preprocessing and trained a deep learning model to translate ISL gestures into text with real-time feedback, featuring a user-friendly interface for accessible communication between sign language users and non-users.

PROFESSIONAL EXPERIENCE

Hewlett Packard Enterprise (HPE), Texas, United States | *Cloud Developer Intern* **May 2026 - Present**

- Developed and integrated AI-powered test generation-validation skill that learns from existing test patterns, reuses available helper functions, generates production-ready test cases against live servers, and continuously validates them through repeated execution, reducing manual testing effort by nearly 80% improving test coverage and developer productivity.
- Integrated and bundled Hybrid Cloud provisioning workflows(cloud infrastructure) into the core provisioning plugin, standardizing post-provisioning infrastructure setup and minimizing networking and VLAN configuration errors.

Otelier, Bengaluru, India | *FullStack Developer(REST, SDLC)* **Aug 2022 - Jul 2025**

- Worked with the Product Engineering Team on full-stack projects for global hotel brands in a fast paced environment, developing UI/UX features for efficient CRUD operations and delivering front-end data visualizations for analytics.
- Headed the team for development of a new product called "**TruePlan**" from the ground up, delivering a competitive market solution that incorporated features like real-time collaborative editing with active user presence indicators, while offering complete customizability for users.
- Drove performance optimizations to reduce load times and storage footprint, enhance usability, and implement scalable data reprocessing with reliable locking mechanisms resulting in a 30% increase in daily active users.
- Built backend services for secure data ingestion from SFTP servers, designed optimized RESTful APIs for converting raw files to structured JSON, and improved data processing performance by 20% while reducing DB storage usage by over 60% using efficient algorithms and FreeMarker-based APIs.
- Led the team responsible for adapting the application to meet i18n standards for APAC countries, managing currency and date-time formats across the system. Led QA efforts for API testing, conducted thorough code reviews, managed the on-call rotation, and swiftly resolved critical production issues promptly.

Quicken Inc. (Earlier Intuit Product), *Software Engineer(Backend) -Intern* **Jan 2022 - Jun 2022**

- Collaborated with the Cloud Services team as a Java developer to maintain Quicken's subscription services, upgrading frameworks like Spring Boot and Gradle for compatibility, and performing regression testing to ensure production readiness.
- Identified a critical bug in the system wherein a user can have unbounded extensions of the subscription without paying for it; Fixed and handled exceptions for such a scenario, preventing significant monetary impact on the company.

TECHNICAL SKILLS

- Programming Languages: Java, Spring Boot, Microservices, Python, SQL, NoSQL, MongoDB, HTML,CSS, AngularJS, Spark, Vue.js
- Tools: CI/CD, Bootstrap, GitLab, SnowFlake, Agentic Ai, Docker (basic), Jenkins, JUnit Tests, Hadoop, AWS, Kubernetes, MVC
- Operating Systems: macOS, Linux/Unix, Windows, Ios | Software: Postman, Burpsuite, IntelliJ IDEA
- Misc: Software design, Agile methodologies, Debugging, Computer Architecture, Security Software development, Web/Mobile Application Development, Ansible, PostgreSQL, RabbitMQ, Playwright, AWS Cloud services, Automated testing,

EXTRACURRICULAR ACTIVITIES

- Led large-scale campus events at the International Students & Scholars Center (ISSC) as the primary emcee, planning logistics, coordinating teams, managing crowd flow, and overseeing food distribution.
- Volunteered with community groups including ISA, Hindu Yuva, and NSS to address social issues, while collaborating with the Robotics Club, MSRIT, organizing seminars and workshops, coordinating speakers, developing materials, and mentoring juniors (2018–2022).
- Won the State-level Motorcycle Championship (200cc) organized by KTM in 2017 and represented college in the VTU South-Zonal 10 km race, securing 63/350 rank in 2020.