

# LAASNA RATNA

Seattle, Washington | (360)610-7648 | laasnaratnaabbina@gmail.com | [linkedin.com/in/ratna-a-bbina](https://www.linkedin.com/in/ratna-a-bbina)

---

## SUMMARY

Detail-oriented and solutions-driven Software Development Engineer with a strong foundation in distributed systems, object-oriented programming, and cloud-native application development. Skilled in building scalable, fault-tolerant systems and collaborating across cross-functional teams. Experienced with Java, C++, and real-time operating systems with a passion for delivering innovative technologies in agile environments. Passionate about delivering customer-obsessed solutions and thriving in fast-paced, ambiguous environments where innovation leads change. Experienced in building intelligent systems using Vertex AI for scalable, real-world automation.

## EDUCATION

---

**Master of Science, Information Systems and Technology** **Sept 2023 - Dec 2024**  
**Wilmington University, Delaware**

Relevant Coursework: Cloud Computing, Distributed Systems, ML, System Design, Information Security

**Bachelor of Technology, Electronics & Communication Engineering** **Aug 2015 - May 2019**  
**Marri Laxman Reddy Institute of Technology and Management**

Relevant Coursework: Embedded Systems, OOP, Microcontrollers, Digital Logic, Operating Systems

## PROFESSIONAL EXPERIENCE

---

**Cloud Engineer Intern | Dalave LLC** **April 2025 – Present**

(GitHub: <https://github.com/laasna/travel-concierge-clean>)

(GitHub: <https://github.com/laasna/rag-react-app>)

(GitHub: <https://github.com/laasna/dalave-site>)

(Netlify: <https://dog-bark-translator.netlify.app/> )

(GitHub: <https://github.com/laasna/stock-sentiment>)

(GitHub: <https://github.com/laasna/windsor-news-agent>)

- Applied Amazon Leadership Principles to deliver cloud-native solutions aligned with business impact.
- Designed and implemented secure, scalable solutions on Google Cloud Platform.
- Developed infrastructure-as-code and automated deployment workflows.
- Remediated security vulnerabilities to meet compliance and best practices.
- Designed distributed systems for reliability and fault tolerance.
- Led internal workshops promoting security and software engineering best practices.

• **Travel Concierge AI Web App** | React + Vertex AI Studio- Developed a React-based frontend with radio buttons and checkboxes to collect user preferences and deliver AI-generated, day-wise travel plans.

Developed a React-based travel planning web app.

Screenshot and demo available on GitHub README.

Implemented user-friendly UI and backend integration.

• Integrated Google Vertex AI Studio (PaLM 2) to process user inputs and generate personalized itineraries using prompt engineering.

• **Dalave Website with AI Integration** | React + Vertex AI Agent Engine/Garden- Built a company website for Dalave using React, styled with Avada theme assets, including an AI-based callback request feature. GitHub project link provided.

• **Integrated Vertex AI Agent Engine** to power smart chat agents that respond contextually to user queries based on company services.

- AWS Blog-to-Video AI Automation- Automated YouTube Shorts creation by converting AWS blog content into scripts, voiceovers, and screen recordings using AI tools.
- Focused on topics like Docker acceleration in AWS Code Build, simplifying complex content into short, engaging videos.
- AI Agent Explorer: 46+ Coding Tools for Growth- Researched and documented 46+ AI coding agents with beginner-friendly summaries, use cases, and ideal user profiles.
- Created educational and social content explaining the practical value of each tool to boost learning and community awareness.

**RAG React-App-** Developed a React app featuring blog Q&A with fuzzy search functionality using Fuse.js, demonstrating frontend development and state management skills; GitHub project link provided above.

#### **Built an AI-powered Dog Bark Translator using React & Hugging Face APIs**

- Integrated voice recording and simulated voice pitch analysis to generate dynamic, playful translations of dog barks.
- Overcame challenges with browser audio handling, secure API integration, and GitHub secret protection.
- Demonstrated real-time audio-to-AI pipeline — showcasing the creative edge of LLMs in non-traditional inputs like sound.

**Built a Stock Sentiment Analysis web app-** Developed a real-time stock sentiment analyzer with React.js that fetches financial news using NewsAPI, applies keyword-based sentiment classification, and generates Buy/Sell/Hold recommendations with confidence scoring.

**Built a full-stack news aggregator web app, "Windsor News Agent"-** Enabling users to select categories and dates to fetch real-time headlines from NewsAPI. Integrated subscription feature with email input, responsive UI with dynamic news rendering.

#### **Project Engineer | Avid IT Solutions                      Dec 2020 - Dec 2022**

- Led development of high-availability distributed applications.
- Collaborated with stakeholders to deliver customer-focused cloud solutions.
- Coded scalable backend services using C++ and Java.

#### **Junior Software Trainee | Amity IT Solutions              Aug 2019 - Dec 2020**

- Assisted in object-oriented and multi-threaded programming.
- Supported QA and debugging processes.
- Participated in Agile cycles and contributed to feature rollouts.

## **PROJECTS & SYSTEM DESIGN**

---

- Designed intelligent systems using Vertex AI for automation and predictive analytics.
- Contributed to distributed systems architecture for performance and security optimization.

## **TECHNICAL SKILLS**

---

**Languages:** java, c++, python, c#, javascript (react)

**Cloud platforms:** google cloud platform (vertex ai studio, agent engine, agent garden, discovery engine), aws

**Frontend & web:** react.js, html5, css3, Avada theme styling

**AI & automation:** palm 2, OpenAI api, prompt engineering, llm integration, ai voiceover tools, script automation, ai agent tool research (46+ tools)

**content & video creation:** Canva, YouTube shorts scripting, screen recording tools, ai narration

**APIs & integration:** secure .env configuration, google forms integration, qr code workflows

**Tools:** git, GitHub, visual studio code, infrastructure as code, ci/cd, predictive modeling

**Frameworks & methodologies:** agile, scrum

**Operating systems:** Linux, rtos, windows

**Other skills:** system design, distributed systems, security compliance

## **CERTIFICATIONS**

---

- Associate Cloud Engineer Certification - GCP