Sriabhinay Kusuma (or Abi)

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Objective

Highly driven Master's graduate with dual degree in Computer Science and Cybersecurity with a perfect **4.0 GPA**, having **3+** years of work experience in **Python, JavaScript, Java and AWS**. Seeking to contribute at the intersection of **AI and Secure Software Development**.

Technical Skills

Languages: Python, JavaScript, Java, SQL

Web & Backend: React.js, Next.js, Node.js, Express.js, Flask, Django, Spring Boot

Cloud: AWS (Lambda, DynamoDB, EC2, S3), Docker, GitHub Actions, CI/CD, REST APIs

Databases: PostgreSQL, MySQL, MongoDB, DynamoDB, ChromaDB (Vector DB) **AI**: TensorFlow, Keras, OpenCV, Hugging Face Transformers, LangChain, RAG, GloVe

Others: Git/GitHub, Linux, JIRA, Postman, Figma, Vercel, Agile

Experience

Full Stack Developer – Saayam For All | San Jose, CA (Remote)

July 2025 - Present

- Developed core business backend logic with Java/Spring Boot microservices on AWS (EKS, Lambda) and ReactJS-based frontend.
- Implemented secure authentication and state management by integrating AWS Cognito on the Redux based frontend.
- Secured all microservices with AWS Cognito and a fine-grained Role-Based Access Control (RBAC) model.
- Architected an event-driven system using Apache Kafka; implemented a real-time notification feature with WebSockets.
- Improved user engagement by 20%, leveraged Redis caching to cut API response times by up to 30%.

Tech Stack: Java, React, Spring Boot, AWS, Git/GitHub, Redis

Software Developer - National Institute of Standards and Technology | Huntsville, AL

Jan 2025 – May 2025

- Developed an automated pipeline to collect, pre-process and analyze CPU-generated jitter aligned with NIST SP 800-90B standards.
- Automation with Python/Bash scripts, evaluation across Docker, VM and BareMetal to assess secure environmental settings.

Tech Stack: Python, Bash, Linux, Docker, Git

AI Developer - Garuna

Aug 2024 – Dec 2024

- Developed automated web scraping pipeline processing 1K+ articles monthly, reducing manual data collection by 50 hours/month.
- Created dashboard with real-time data access, and relevance scoring functionality deployed on cloud infrastructure.
- Built a BERT-based NLP classifier with 89% accuracy to perform sentiment analysis on 1100+ customer reviews, implementing clustering algorithms to identify products with negative feedback patterns.
- Fine-tuned LLaMA3-8B with QLoRA, adapter layers, and mixed-precision training, reducing trainable parameters from 8B to 3M, cutting training time by 30%, and boosting accuracy by 8% on 5000+ items.
- Developed RAG pipeline using LangChain, optimizing retrieval and chunking strategies, improving retrieval precision by 20% for domain-specific query processing.

Tech Stack: Python, LangChain, BERT, LLaMA, RAG, React, Flask, Nginx, Docker, AWS Bedrock, CrewAI, JIRA API

Software Developer – *TopMatch*

June 2024 – July 2024

- Designed an intelligent job-matching platform leveraging retrieval-augmented generation (RAG) and pretrained DistilBERT.
- Integrated real-time job feed ingestion, vector embeddings, and LLM APIs for personalized recommendations.

Tech Stack: Python, NextJS, React, RAG, LangChain, HuggingFace, Vector DB

Full Stack Developer - Archeed

Jan 2024 – May 2024

- Launched a job board for architects, connecting 1K+ students and professionals and driving 2.5x growth in monthly engagement.
- Implemented AI-powered semantic search and personalized job recommendations, reducing opportunity discovery time by 40%.
- Implemented role-based authentication and profiles for students, firms, and admins to streamline content submissions.

Tech Stack: Next.js, React, Node.js, Express, MongoDB, Vercel, GitHub Actions, NLP, Vector DB

Frontend Developer - University of Alabama, Huntsville

July 2023 - Dec 2023

- Collaborated on a microservice-based recruitment system to optimize hiring workflows for university departments.
- Improved review productivity by 50%. Worked on faculty collaboration tool improving user experience and code maintenance.
- Implemented RESTful APIs and microservices architecture using Django and Python, ensuring scalable system design.

Tech Stack: React, JavaScript, Python, Redux, REST APIs, AWS

Graduate Teaching Assistant - University of Alabama, Huntsville

- Aug 2022 April 2023
- **CS454/554 Cloud Computing** Lab Setup and Support: serving 50+ students, creating a practical cloud environment that increased successful project completions by 20%. Worked with professors to build impactful assignments for students.
- **CS104 Python** Student Assistance and Grading: Guided 40+ students through in-person labs, offering individualized support that elevated assignment completion rates and improved average scores by 10%.
- **CS317 Design and Analysis of Algorithms** Responsible for grading and in-person academic support for 60+ students. Assisted the professor in preparing coursework, assignments, and exams which enhancing class efficiency.

Tech Stack: AWS, Python, Data Structures and Algorithms, Deep Learning, Proxmox, OpenStack

Software Developer Intern - Garuna / India

May 2021 – June 2022

- Developed services that establish a strong online presence to businesses, driving a significant increase in revenue.
- Delivered digital solutions that enhanced product reach, improved user interaction and a strong boost in web traffic.
- Incorporated technologies into development process that boost delivery time by 30% by automated testing.

Tech Stack: React, JavaScript, HTML/CSS, Node.js, Express, Django, Python, Cucumber, REST APIs, Git/GitHub

Certifications

AWS Certified Developer - Associate

Projects

Archeed | Next.js, React, Node.js, Express, MongoDB, Vercel, GitHub Actions, NLP, Vector DB - Try it here

- Developed a job board for architects, connecting 1K+ students and professionals.
- Implemented AI-powered semantic search and personalized job recommendations, reducing opportunity discovery time by 40%.
- Implemented role-based authentication and profiles for students, firms, and admins to streamline content submissions.

Sneakers Adda | NextJS, React, Node.js, PostgreSQL, Tailwind CSS, Vercel - Try it here

- A one stop solution for sneakers shoppers with highly optimized user experience, fresh inventory, and shopping experience.
- Optimized load times and SEO rankings by server-side rendering, caching, database operations, increasing user engagement.

AI-Scraper | Python, Playwright, BeautifulSoup, JavaScript - Try it here

- Engineered a prompt-driven AI scraping pipeline using LLM agents to automate data collection across anti-bot websites.
- Reduced token usage by 80% and increased scraping efficiency, enabling scalable use in data-driven applications like market research.

Education

Master of Science – Computer Science & Cybersecurity	University of Alabama in Huntsville	4.0	GPA	2022 – May 2025
Bachelor of Technology - Computer Science	SREC	3.3	GPA	2018 - 2022