ARYAN AGRAWAL

(929) 799-1961 | aryanagrawal0007@gmail.com | www.linkedin.com/in/aryanagrawal9 | Falls Church, VA 22043

EDUCATION

Virginia Tech, Virginia, USA

May 2025

Master's of Engineering in Computer Science and Applications

Courses: Data Structures & Algorithms, Web Development, UI/UX, Cloud Computing, AI Tools in Software Delivery

Jaypee University of Information Technology, India

July 2017 - June 2021

Bachelor of Technology in Information Technology

PROFESSIONAL EXPERIENCE

Iris Software Inc. (LifeScan Team), Edison, NJ, USA | Link

June 2024 - August 2024

Software Engineer Intern

- Developed MAIA, an advanced GenAI-powered chatbot and workflow application using Python, LangChain, and Streamlit. The platform featured image generation, the creation of a Knowledge Base for custom LLMs, and Excel integration, aimed at optimizing business processes and improving productivity.
- Led the transition of the frontend from **Streamlit** to **ReactJS**, which improved user engagement by **25%** and reduced page load time by **40%**.
- Deployed cloud infrastructure on AWS & Azure using Docker and ECS for scalability.
- Optimized backend workflows & AI agent automation with **Azure** & **DynamoDB**, improving efficiency by **30%** and reducing data retrieval time by **25%**.
- Enhanced LLM training via prompt engineering, improving processing speed by 35% and result accuracy by
 50%.

Vikreed Solutions, Pune, Maharashtra, India | Link

July 2021 – July 2023

Software Engineer

- <u>Benelevate</u> Financial Aid Calculation Portal
 - Built a Python-based backend to automate student waiver calculations using Pandas & NumPy.
 - Integrated dynamic PDF generation with **ReportLab** & **WeasyPrint** for waiver summaries.
- <u>Hays Groundwater</u> Water Level Monitoring Platform
 - Developed and maintained backend services to fetch, store, and visualize water-level data in Texas counties using **Node.js**, **Express**, and **MongoDB**.
 - Designed real-time data visualization dashboards using Chart.js and React.
 - Ensured secure role-based access to sensitive groundwater data using **JWT Auth**.
- <u>LearnForbes</u> Content Upload Automation System
 - Architected a content ingestion pipeline that allowed course vendors to upload and categorize educational material using **Django Rest Framework**.
 - Integrated Learning Management System (LMS) APIs to manage course content across platforms.

ACADEMIC PROJECTS

Ecommerce Platform (Remediwave) | Django, Javascript, HTML, CSS, PostgreSQL, Ajax, Microsoft Azure, Python

- Developed an **e-commerce** website with a user-friendly interface using **HTML**, **CSS**, and **JavaScript**.
- Implemented **Django's MVC architecture** with **PostgreSQL** for efficient data storage, improving code maintainability by 30% and reducing new feature development time by 20%.
- Leveraged Microsoft Azure for human-Al interaction, enhancing user experience and reducing customer support queries by 20%.

Online Bookstore System (Biblobazar) | Figma, HTML, CSS, JavaScript, Node.js, React, MySQL, REST APIs, JQuery

- Designed UI in Figma and implemented it in React, utilizing Router, hooks, props, and context API.
- Engineered Java backend with Jakarta EE and Eclipse Jersey Server for RESTful APIs.
- Optimized data persistence using **DAO**, **JDBC**, and **MySQL** for secure storage.

Personalized Cover Letter Generator (MyCoverKraft) | Streamlit, Python, NLTK, OpenAPI, NLP

• Built a tool to automate personalized cover letter creation, reducing user effort. Developed the frontend with Streamlit, backend with **Python** & **NLTK**, and integrated **OpenAPI** for enhanced customization.

TECHNICAL SKILLS

- Programming languages: Java, Python, C/C++, Git, .NET, Javascript, Kotlin, Golang, C#
- Web Technologies: HTML/CSS, Tailwind CSS, Typescript, React, Node.js, REST APIs, FastAPII, Redux, GraphQL, Angular, Kubernetes, NextJS, Full-stack, ES6, Spring, Hibernate, Apache, Gradle, Maven, Vue
- Databases/Cloud: MySQL, PostgreSQL, AWS, CI/CD, SQL, GCP, Kafka, Jenkins, NoSQL, Oracle
- **Methodologies:** Agile, RESTful Architecture, Responsive Design, Prompt Engineering, Machine learning, Shell scripts, End-to-end, JUnit, DevOps, Database, Problem-solving, SaaS, Workflow, Machine Learning, Unity, Pytorch, TensorFlow, computer vision, deep learning