

AMBUD LAHIRI

+91-7595839899 | ambudlahiri123@gmail.com | [Linkedin](#) | [Github](#) | [Leetcode](#)

EDUCATION

Bachelor of Technology in Computer Science (Artificial Intelligence)

Bennett University

August 2022 – Present

CGPA : 9.45

EXPERIENCE

Undergraduate Research Intern

Bennett University

August 2024 – Present

- Engineered a hypervisor-level cache side-channel TLB attack detection system using Intel's PCM, achieving 85% accuracy in identifying Flush+Reload, Flush+Flush, and Prime+Probe attacks through real-time monitoring of IPC.
- Added Explainable AI using SHAP to analyze feature importance by leveraging GradientExplainer.

App Development Lead

Syntalix

January 2024 – July 2024

- Piloted the development of a music and video streaming app utilizing Flutter and Dart, decreasing app latency by 60% and improving UI responsiveness through code optimization.
- Reduced app development cycle time by 25% through the introduction of daily stand-up meetings and sprint retrospectives, addressing critical roadblocks and fostering continuous improvement within the team.
- Conducted 50+ user interviews and usability tests throughout the app development lifecycle, directly influencing design decisions and resulting in 90% positive user feedback on core features.

PROJECTS

Harmonix | Flutter, Dart

November 2024 – December 2024

- Engineered a Flutter app delivering both music and video content, achieving 92% operational efficiency on Android devices.
- Crafted three distinct interfaces—a secure login portal, a personalized account hub, and a comprehensive media dashboard thereby reducing onboarding duration by 28%.
- Launched interactive playlist creation feature using Flutter, enabling users to personalize content experiences, which resulted in a substantial 35% growth in net user engagement metrics on the app.
- Refined the visual experience with a striking gradient theme and custom media controls, resulting in a 25% increase in overall user retention.

Bail Reckoner | Next.js, Django, Python, Llama 3.1, Fast API

August 2024 – September 2024

- Developed and integrated 90% of core UI components, encompassing forms with immediate feedback, real-time data visualizations, and live updates, leading to smoother team workflows and higher user satisfaction.
- Facilitated seamless data flow by developing 30% of FastAPI endpoints, integrating the frontend with an AI-driven legal database; this reduced manual data entry errors by approximately 10% for legal professionals.
- Enhanced the integration of 55% of real-time legal database access and AI-driven precedent matching, improving automated case law retrieval and strengthening judicial decision-making accuracy.

TECHNICAL SKILLS

Languages: Java, Python, C++, SQL (MySQL), NoSQL(MongoDB), JavaScript, Typescript, HTML, CSS.

Frameworks: Flutter, Next.js, Qt.

Developer Tools: Git, GitBash, VS Code, Visual Studio, PyCharm, IntelliJ, Android Studio, Firebase, Tkinter.

CERTIFICATIONS

- Algorithmic Toolbox
- Supervised Machine Learning
- Software Development Processes and Methodologies