

ALBEN ANTAPPAN

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EDUCATION

Indiana University Bloomington, Luddy School of Informatics, Computing, and Engineering Expected May 2026
Master of Science in Data Science

Xavier Institute of Engineering, University of Mumbai August 2017 - June 2021
Bachelor of Engineering in Information Technology CGPA: 8.54/10

PROFESSIONAL EXPERIENCE

Capgemini | Senior Analyst / Software Engineer | Mumbai July 2021 - July 2024

- Executed the development and deployment of 890 finance framework solutions for Capgemini I&D Finance, revolutionizing forecasting and simulation processes across 7+ business units and 25+ regions. Delivered a 20% decrease in manual workload and enhanced forecasting accuracy by 15%.
- Engineered a comprehensive ETL model and solution utilizing Flask APIs, MySQL integration, and PowerBI reporting; decreased the finance team's daily workload by 30% and empowered real-time analysis capabilities.
- Created a proof of concept in Microsoft Fabric for the migration of the ETL model and integration of PowerBI reports, including the migration of existing data and improved, optimized data transformation methods.
- Introduced and executed cutting-edge proof of concepts for finance solutions through comprehensive R&D; achieved a notable 25% decrease in processing time for complex financial tasks, driving significant operational efficiency gains.

PROJECTS

Lie Detection Using Facial Analysis, EDA, Pulse, and Temperature | Lead Developer

- Spearheaded the development and integration of an IoT system that incorporated machine learning for effective lie detection. Analyzed data from 4 parameters and integrated the outcomes to output a single result with 91% accuracy.

Alexa-Based Smart Home Monitoring System | Team Lead

- Led the project team in developing an IoT solution for remote home monitoring system. Expanded the system's capabilities to include control of home appliances from anywhere in the world, resulting in a 20% increase in user convenience and satisfaction and 10% reduction in utilities bill.
- Developed a robust and scalable system by leveraging IoT, Python, ThingSpeak, Pushingbox API, and AWS Lambda, resulting in a 20% reduction in manual processes and saving over 144 hours per month.

SKILLS

Certifications: GCP PMLE, Microsoft Azure & PowerBI, IBM Data Science, NPTEL Cloud Computing & Data Science

Programming Languages: Python, Flask Framework, Java, C, C++, HTML5, CSS3

Cloud, Databases & Tools: GCP, Azure, MS Fabric, R, MySQL, MSSQL, SQLite, PostgreSQL, PowerBI, Tableau, BigQuery

RESEARCH & PUBLICATIONS

- **Lie Detection Using Facial Analysis, EDA, Pulse, and Temperature** ([JETIR](#))
- **Research on Lie Detector Using Facial Analysis and Heartbeat Sensing** ([IJARESM](#))
- **Alexa-based Smart Home Monitoring System** ([IEJRD](#))

LEADERSHIP EXPERIENCE

Co-organizer | TEDxXIE | Xavier Institute of Engineering, Mumbai August 2019 - March 2020

- Orchestrated the organization of a TEDx event within the college, aligning with TED's standards and guidelines. Led and mentored a team of 26 members throughout the event-building process.
- Curated the delivery for speakers in accordance with the event's theme, ensuring a cohesive and impactful event flow. Established partnerships with 5+ organizations, securing sponsorships and achieving 100% ticket sales.

HOD | Hospitality Committee | Spandan | Mumbai January 2020

- Led and coordinated a team of 8 members to execute the plan and support over 20 events during the festival, ensuring its success and smooth operation.

HONOURS, AWARDS & CO CURRICULAR ACTIVITIES

- Recognized as a Three-time Rising Star and XtraMile awardee at Capgemini.
- Achieved the best project award in the final-year project competition during my bachelor's.
- Awarded the SICC Genius title in the Shirsra International Cognitive Championship.
- Participated in the 2019 Maharashtra state legislative assembly election for the Election Commission.