ARNAV BHATTACHARYA

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Personal Profile

Master in Computer Science student from Trinity College Dublin with a strong academic background and 2 years of experience in software development, data analysis, and machine learning engineering. Demonstrated expertise in developing APIs, implementing automation strategies, and analyzing challenging datasets for improved business efficiency. Committed to creating engaging and intuitive digital experiences through technology.

Education

September 2022 – September 2023: Trinity College Dublin
MSc in Computer Science (Intelligent Systems), Grade: 2.1
June 2016 – June 2020: Vellore Institute of Technology, India
BTech in Computer Science and Engineering with Specialization in Information Security, Grade: 1.1

Professional Experience

Jan 2020 – Aug 2022: Software Developer, Schneider Electric, India
- Spearheaded development of 20+ high-quality APIs using APIGEE, Postman, GIT, Swagger, SQL & XML to support business requirements & integration of various domains.
- Installed an automated Static Code Analysis system using Nodejs and React to enhance software quality and reliability within the organization's business systems, resulting in a 30% reduction in related issues.
- Optimized deployment cycles through CI/CD processes for a 15% increase in customer satisfaction and efficiency.
- Analyzed complex data sets to identify issues & devise solutions efficiently while improving customer engagement by 15%.
- Forged Schneider Electric website utilizing Drupal within an agile team environment resulting in a reduction of 70% turnaround time.

May 2018 – Jun 2018: Web Developer (Intern), Indian Oil Corporation, India
- Developed and applied a Java-based Gate Pass Management System, resulting in a 40% increase in hardware tracking efficiency.
- Collaborated closely with the Information System Department to design a robust system architecture and gather requirements, ensuring seamless integration and alignment with organizational needs.
- Led comprehensive testing and debugging efforts, resulting in a 20% reduction in system errors and ensuring high reliability for hardware tracking and maintenance processes.

Volunteer Experience

Mar 2018 – May 2020: Member, Rotary Club of Vellore Midtown, India
- Engaged in impactful cancer awareness campaigns, actively reaching out to 500+ individuals to raise awareness about the disease and its impact.
- Engaged in 10+ blood donation drives, contributing to the collection of 100+ units of blood for medical treatments and emergencies.
- Contributed to tree plantation initiatives, planting 200+ trees and promoting environmental sustainability in the community.

Apr 2015 – May 2016: SEARGENT-AT-ARMS, Rotaract Club of Thane Skyline, India
- Oversaw and maintained discipline during 20+ events as Sergeant at Arms, ensuring a positive and organized environment for club members and attendees.
- Executed successful management of logistics for 15+ club activities and events, resulting in seamless execution and timely coordination.

- Established protocols and procedures to uphold order among 50+ members and participants, fostering a disciplined and structured atmosphere.

Projects

Research Projects at Trinity College Dublin:

Dublin Restaurant Review Analysis –
- Created and executed a machine learning algorithm predicting Dublin restaurant ratings on TripAdvisor, achieving 85% accuracy.
- Coordinated a team to streamline data pre-processing, feature engineering, and model evaluation, reducing training time by 30% and ensuring robust performance.

Dublin Disaster Management System –
- Initiated the end-to-end development and deployment of "Disastro" system, leveraging state-of-the-art technologies.
- Reduced average response time by 30%, enabling authorities to detect and respond to threats more efficiently.

Smart Pillow –
- Engaged with a 4-member team to develop a cutting-edge smart pillow.
- Utilized and integrated advanced hardware components, such as ESP32 and ESP32-S2-Kaluga, pressure sensor, microphone, tilt sensor, temperature and humidity sensor, vibration motor, and speaker.

Adaptive Dating Application –
- Constructed and deployed "Wingman", a revolutionary mobile dating application with an adaptive algorithm that increased match accuracy by 25% and fostered meaningful connections.
- Guided cross-functional teams in optimizing Wingman, collaborating with UI/UX designers, developers, and testers to streamline the interface and functionality, resulting in heightened user satisfaction.

Personal Research Projects:

E-Commerce Web Application:
- Pioneered the development and launch of an innovative e-commerce web application using the MERN(MongoDB, Express, React, Node.js) stack, resulting in a 40% increase in user engagement, a 30% boost in sales revenue, and significant improvements in performance and database management.

Video Streaming Website:
- Engineered and deployed a cutting-edge video streaming web application with a visually stunning and intuitive user interface, incorporating a sophisticated recommendation system that significantly enhanced user engagement and satisfaction. MERN(MongoDB, Express, React, Node.js) stack was used.

Cook Book:
- Formulated and implemented a feature-rich recipe storage platform with a user-friendly interface, utilizing EJS, MongoDB, Express, Node.js, and Bootstrap. Streamlined the database structure to enhance data retrieval speed by 40%, resulting in a seamless and optimized user experience.

Technical Skills and Certifications

Technical Skills:
- Data Science and Machine Learning
- Python programming
- Data analysis and visualization
- Front-end web development (HTML, CSS, JavaScript, React)
- Version control
- User experience design and digital marketing
- Prompt Engineering

Certifications:
- IBM Data Science Specialization (IBM)
- Foundations of User Experience (UX) Design (Google)
- The Fundamentals of Digital Marketing (Google Digital Garage)
- Meta Front-End Developer Professional Certificate (currently pursuing)

References are available upon request.