

ABHIRUP DEY

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Technical Skills

Programming Languages: C, C++, Python, Java, HTML, CSS, JavaScript

Frontend Tools: React.js, Recoil, Tailwind CSS, Bootstrap, npm, CDN

Backend: Node.js, Express.js, Firebase, WebSockets

Databases: MongoDB, MySQL, PostgreSQL, Mongoose, Prisma

DevOps & Cloud: AWS/Azure basics, Docker, Heroku, CI/CD pipelines

Production Tools: Git/GitHub, Stripe, Streamlit, Nginx, Auto Scaling Groups, Load Balancers, Postman, npm/yarn, Webpack

Additional: Agile/Scrum, UI/UX (Figma, Adobe XD), Cybersecurity fundamentals (HTTPS, OAuth) Advanced Excel, Data Analysis

Relevant Coursework: Data Structures, Algorithms, Web Development, Databases, Object-Oriented Programming

Experience

Intern – Machine Learning Department

June 2023 – September 2023

Webdesk Technologies Pvt. Ltd.

Kolkata, West Bengal

- Developed a customer segmentation model using clustering algorithms (K-means, DBSCAN), improving marketing campaign efficiency by 20%.
- Engineered features from raw JSON/CSV datasets, reducing noise and enhancing model performance by 15%.
- Collaborated with data engineers to optimize AWS-based data pipelines, reducing model training time by 30%.

Artificial Intelligence Intern

July 2023 – September 2023

AcmeGrade

India

- Worked on AI projects, including data preprocessing, model training, and deployment; integrated and worked over AI-based features into web applications using Python, TensorFlow, and Flask increasing user engagement by 20%.
- Created SPAM/HAM Classification System to classify emails/text messages as SPAM or HAM using Natural Language Processing techniques; preprocessed text data using NLTK and SpaCy, and trained models (Naive Bayes, Logistic Regression) with Scikit-learn, achieving 92% accuracy.

Projects

CodeFit / AI powered fitness coach platform

- Developed CodeFit, an AI-driven fitness platform that generates personalized workout routines and diet plans through voice conversations, 45% increase in user engagement.
- Built a modern full-stack application using Next.js 15, TypeScript, and Tailwind CSS with a cyberpunk-themed UI, ensuring seamless performance across 15+ device types and reducing initial page load time by 35%.
- Implemented Convex real-time database with Clerk authentication for secure user management; deployed advanced AI prompt engineering with Google Gemini for generating structured workout plans and nutrition guidance, serving active users with 100% personalized program creation.

Sundown Studio / Interactive Interior Design Website

- Developed Sundown Studio, an interactive website that transforms room layouts into dynamic studio setups, increasing user engagement by 25%.
- Built a responsive UI using React.js and Tailwind CSS, ensuring compatibility across 10+ devices and browsers and reducing page load time by 30%.
- Optimized performance using lazy-loading and asset compression; conducted user testing with 20+ participants, improving navigation and visual effects to increase user retention by 15%.

Pizza Delivery Web App / Full Stack Web Application

- Created a full-stack pizza delivery app using React.js for the frontend and Node.js with MongoDB for the backend, enabling users to place orders with a 95% success rate and reducing average checkout time by 30%.
- Integrated Stripe payment gateway, processing 20+ test transactions with 100% accuracy in real-time payment confirmation.
- Created an admin dashboard for product management, improving workflow efficiency by 20% and reducing manual errors by 15%.

Simon Game / Interactive Memory Game

- A browser-based memory game that challenges players to replicate increasingly complex color sequences, recreating the classic memory game experience, achieving a 95% user satisfaction rate based on feedback from 50+ test players.
- Implemented smooth animations and audio feedback, increasing user engagement by 30% and enhancing the overall gaming experience; engineered core functionalities like random sequence generation and real-time input validation, achieving 100% accuracy in game logic and performance.

Ephemeral Equilibrium / Environmental Awareness Platform

- Reimagined an interactive website focused on environmental awareness and sustainability; Integrated content that promotes eco-friendly practices and a commitment to a greener future.
- Enhanced user engagement by 40% by leveraging **GSAP animations** to create visually captivating and immersive experiences. Developed a fully responsive interface using **HTML, CSS, and JavaScript**, ensuring seamless functionality across all devices.

Education

Institute of Engineering and Management
Bachelor of Technology in Computer Science
B.D.Memorial Internation School
Higher Secondary Education

October 2022 – June 2026
Kolkata, West Bengal
CBSE
Kolkata, West Bengal