

Peal Hasan

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EDUCATION

Stony Brook University

Expected May 2026

Bachelor of Science in Computer Science

Stony Brook, NY

- Relevant Coursework: Object Oriented Programming JAVA, Data Structures and Algorithms, C Programming, Computing in Python, Software Development with HTML, CSS, Javascript, React, MongoDB, and PostgreSQL
- Active Member of Stony Brook Computing Society, participating in weekly coding challenges, and hackathons

TECHNICAL SKILLS

Languages: Typescript, Java, Python, Javascript, HTML, CSS

Frameworks: React, Node.js, Next.js, Express.js, REST API

Developer Tools: Git, Postman, Jest, Firebase, Vite

Databases: SQL (PostgreSQL), NoSQL (MongoDB)

EXPERIENCE

Software Engineering Intern

Oct 2022 – March 2023

Plant3r LLC

Remote

- Built Figma-based front-end screens, improving design efficiency by 20% using UX principles for early development
- Implemented testing procedures with Jest and Postman, increasing stability by 15% by resolving pre-launch issues
- Reduced data complexity by 30% by streamlining data transfers between the database and app, ensuring scalability
- Coordinated feature planning in an Agile environment, accelerating timelines by 25% through close collaboration with cross-functional teams and refining detailed product requirements using Jira to efficiently track milestones

Software Engineering Intern

March 2022 – May 2022

SpotELF Inc

Brooklyn, NY

- Developed features for Talantra app, helping 1,000+ users connect to local events and purchase option for artworks
- Promoted to lead development of a real-time notifications feature, boosting engagement by 30% with real time events
- Assisted in developing task-tracking workflows in Slack, increasing task completion by 15% with timely task delivery
- Developed and optimized backend API endpoints, improving data retrieval speed by 40% and enabling seamless integration between the app and third-party services, which enhanced overall system performance and reliability

Database Management Intern

June 2022 – Sept 2022

NYC DOE DIIT

Remote

- Managed SQL databases, improving data accuracy by 20% by documenting metadata across multiple datasets
- Increased data accessibility by 25% by automating metadata documentation and creating reports using SQL and Excel
- Enhanced data integrity by conducting regular audits and resolving discrepancies across multiple SQL datasets
- Improved database performance by 30% by streamlining data processes and optimizing SQL queries for faster retrieval

PROJECTS

Sign Language Recognition ML Model and Learning Platform | [Github](#) | [Website](#)

July 2024 – Aug 2024

- Achieved 98.98% ML model accuracy by training a Random Forest on 87,000 images for real-time hand recognition
- Processed 1,000+ frames per minute by integrating Mediapipe, OpenCV, and Flask for real-time hand detection
- Developed 100% real-time feedback by building a Next.js and Tailwind CSS frontend with progress tracking
- Reduced authentication time by 50% by implementing Google OAuth 2.0 and PostgreSQL for user management

AI-Powered Twitter/X Newsletter and Podcast Service | [Github](#) | [Website](#)

June 2024 – July 2024

- Increased user engagement by 50% for 100+ subscribers by implementing front-end with Vite, TypeScript, and React
- Developed and secured back-end services with Express, Node.js, Passport (Local and Twitter Authentication), and stored sessions on Redis, reducing response time by 40% by optimizing API calls with Lodash and caching mechanism
- Improved user satisfaction by 30% by executing MongoDB CRUD operations via a user-friendly admin dashboard
- Boosted content delivery efficiency by 60% by integrating X API, Google Gemini API, OpenAI API, and SendGrid API