

Ayush Shah

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EDUCATION

Lehigh University

Expected Graduation: December 2024

Bachelor of Science in Computer Science and Business, GPA: 3.6

Relevant Coursework: Data Structures and Algorithms, Software Engineering, Operating Systems, Deep Learning

SKILLS

Proficient: Java, JavaScript, Python, C++, TypeScript

Intermediate: C, C#, Rust, Swift, Dart

Technologies: Flask, Node.js, Express.js, React.js, Next.js PostgreSQL, MySQL, MongoDB, DynamoDB, Firebase

EXPERIENCE

Software Engineering Intern

May 2024 – Aug. 2024

Lehigh University (Technology Infrastructure and Operations)

Bethlehem, PA

- Developed 5+ features using AWS Bedrock, Python, and AI agents with a 90% utility rate for 7k+ active users
- Optimized the chatbot service in Python using the latest version of Claude 3 (AWS), resulting in a 63% reduction from the original chatbot response time
- Led the development of Lehigh University's first AI-driven chatbot, leveraging AWS Lambda and DynamoDB to deliver fast and reliable information retrieval for students

Software Engineering Intern

May 2023 – July 2023

Beder (Study Abroad and Internship Program)

Barcelona, Spain

- Utilized Next.js for full-stack development tasks, enhancing the company's website user interface, leading to a 17% increase in weekly visitors
- Designed and integrated backend event tracking functions, capturing 10,000+ user interactions weekly, which provided insights that guided enhancements to the website and improved user engagement

Software Engineering Intern

May 2022 – Aug. 2022

Victaulic

Easton, PA

- Created a Python script using Selenium to automate data entry from Excel to LiquidPlanner (an intraweb used by Victaulic) which reduced data entry times by 98% and allowed over 20,000 entries to be completed in less than 24 hours
- Developed a Java and PostgreSQL database management system for retrieving information regarding equipment in the Engineering Lab, which reduced retrieval times by 85%

TA/Grader - Design and Analysis of Algorithms (CSE 340)

Jan. 2024 – Present

Lehigh University

Bethlehem, PA

- Hold office hours twice a week for 100+ students and help students with any problems they may be having, grade weekly homeworks, and respond to student questions on Piazza

PROJECTS

[MelodyMagnet](#) | Python (Flask), React.js, AWS, Selenium

- Developed and deployed a full-stack web application to Amazon EC2 that allows users to download their Apple Music playlists as MP3 files, enabling offline listening, free of cost
- Leveraged Selenium to scrape song names from Apple Music Playlist, then used the YouTube API to get the URL of each music video, and PyTube for converting these URLs into MP3s, which were downloaded to the user's device

[Capstone: Lutron Electronics](#) | Next.js, TypeScript, Konva.js, Socket.io, Firebase

- Developing a floor plan editor for Lutron Electronics with three other developers, aimed at transforming smart lighting solutions by enabling users to design, annotate, and share floor plans in real-time
- Implementing a comprehensive testing approach with Cypress and Jest to validate user experiences and applying unit tests and integration tests to maintain high-quality, bug-free features

[PulseFeed](#) | Python (Flask), PostgreSQL, React.js, Supabase

- Implemented a personalized news delivery platform by integrating Google News RSS Feed with Python, utilizing OpenAI's GPT-4 API for the parsing of user preferences into search keywords