Samuel Shulman

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Education

Yeshiva University, Yeshiva College, New York, NY

Bachelor of Science in Computer Science, Distributed Systems Track, 05/2025

GPA: 3.5

Course Work: Introduction to Computer Science, Linear Algebra, Data Structures, Math for CS, Algorithms, Computer Organization, Industrial Software Engineering, Operating Systems

Skills

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

Frameworks: Junit, React, Node is, Git, GitHub, Jira, Maven, Visual Studio Code, IntelliJ IDEA, AWS

Experience

Cyber Security Research Assistant, Katz School at Yeshiva University

Sep '22 - Jan '23

- Carried out Slow Header, Slow Read, and Slow Post DDoS attacks using the <u>SlowHTTPTest</u> tool on a sample microservice called Stan's Robot Shop and captured and analyzed the packet data using Wireshark.
- Working in tandem with Dr. Sai Praveen Kadiyala, who is a post-doc fellow at the Katz School at Yeshiva University

Projects

QuickSplit, Personal Project - In Progress

- Developed and designed software that allows tables in restaurants to easily split the check by scanning the table QR code
- Led a team of five of my peers in building the backend architecture and delegated tasks to ensure timely delivery and high-quality results
- Utilized Spring to create components enabling multi-threaded POST and GET requests to our database
- Created Docker images, then deployed them to an EC2 instance

Automated Course Registration System(ImIn), Personal Project

- Developed a registration system for YU students to enter their desired classes at their convenience, and ImIn registers for the user as soon as their slot opens in less than two seconds
- Designed and implemented REST APIs to make backend logic accessible, facilitating easy integration with any platform
- Built the front end using React and the Material UI library to create a user-friendly interface
- Utilized Stripe Javascript SDK for payment processing and Stripe webhooks to trigger AWS Cognito to authenticate users
- Stored user information such as email, Stripe customer ID, and Stripe subscription ID in a Dynamo DB table for secure and scalable data management

Elite Managing - CRM, Yeshiva University Summer Project

- Built a feature for businesses to issue membership badges for customers, which gave the customer various perks to be redeemed
 and stored these badges in AWS S3 buckets
- Took advantage of AWS Cognito user pools to differentiate between Business accounts and Customer accounts which allowed the correct CRUD permissions to be allocated appropriately
- Stored Business, Customer, and Badge information in three separate DynamoDB tables, which enabled the correct user information to be displayed on their profile page
- Communicated with DynamoDB using RESTful APIs built using AWS API Gateway
- Built a microservice using an AWS Lambda function triggered by EventBridge to email customers once a month

Search Engine, Yeshiva University Semester Project

- Our semester project at Yeshiva University was to build using Java a search engine and implement various functionalities while using several Data Structures
- Initially created an in-memory storage system by building a HashTable that implemented separated chaining to handle collisions
- To undo a previous action, I built a Stack that pops off either the most immediate action or will go through the Stack and pop a specified action
- For search functionality, I implemented a Trie where all documents are immediately placed to make searching fast and easy
- Created a BTree for a more advanced storage system that would write documents to disk if the memory limit was exceeded, which was tracked by implementing a min Heap to measure document usage