Anik Singha

aniksingha@outlook.com | linkedin.com/in/anik-singha | github.com/aniksingha | aniksingha.com

EDUCATION

Hunter College

B.A - Computer Science; GPA: 3.66   *Aug 2021 - May 2025*

Relevant Courses: Software Analysis and Design 3 (DSA), Computer Architecture 2, Operating Systems, Intro to Data Science, Relational Databases and SQL Programming, VR/AR/Mixed Reality, Practical Web Development

EXPERIENCE

Memorial Sloan Kettering   *Jun 2024 - Aug 2024*

Software Engineer Intern

- Designed a Neo4j graph database to efficiently store and manage patient data, enabling quick retrieval and updates
- Built a high-performance REST API using FastAPI with asynchronous requests, optimizing database interactions
- Developed a CI/CD pipeline with GitHub Actions for seamless integration and continuous deployment to AWS
- Implemented load balancing and sticky sessions with NGINX on AWS Elastic Beanstalk for simplified deployment
- Created a React-based visualization tool for researchers to easily identify and analyze patient trends

MNC Development   *Feb 2023 - May 2023*

Software Engineer Intern

- Developed a fully functional real estate website from scratch, allowing users to easily rent/buy properties
- Utilized React and Material UI to create a visually appealing and responsive UI.
- Leveraged Firebase to develop and implement a robust backend solution, incorporating a high-performance database for efficient data storage and management
- Designed and implemented an advanced filter and sort functionality, resulting in a streamlined user experience

PROJECTS

AI Subtitle Generator

- Developed a robust subtitle generation platform by creating a customized wrapper for the Whisper AI Model
- Implemented a self-hostable HTTP microservice using Flask to streamline integration with web applications
- Containerized the server application with Docker and deployed to AWS EC2
- Designed and implemented an intuitive frontend using React, allowing users to effortlessly upload files and utilize the subtitle generation service

Password Manager

- Developed a comprehensive password manager using Fernet encryption, hashing, and salting for enhanced security
- Implemented OAuth with one-time passwords for secure user authentication and session management using cookies
- Engineered and deployed a high-performance MongoDB database to the cloud, leveraging efficient queries and indexing to optimize data retrieval speeds
- Architected a powerful backend using Flask and crafted an engaging and interactive frontend with React

Chat App

- Engineered a comprehensive chat application incorporating user authentication, profile management, and real-time messaging functionality
- Utilized AWS DynamoDB for efficient user and message storage, streamlining access and creation
- Harnessed the capabilities of React, Material UI, and EmotionJS to create a modern UI and layout
- Optimized build processes using Vite and created a CI/CD pipeline using github actions for easy deployments

TECHNICAL SKILLS

Languages: Python, Javascript, C#, Golang, SQL, OpenCypher, YAML, HTML/CSS
Frameworks/Tools: AWS Cloud, React, NodeJS, FastAPI, Flask, ExpressJS, Github Actions, Docker, Git
Databases : MongoDB, PostgreSQL, Neo4j, DynamoDB