

PETER RAUSCHER

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EDUCATION

Stevens Institute of Technology

Bachelor of Science in Computer Science

GPA: 3.2

Aug 2019 – May 2023

Awards: Edwin A. Stevens Scholarship, Dean's List 2019 and Spring 2022

Coursework: Data Structures & Algorithms, Database Management, Concurrent Programming, Web Development, Agile Methods

Clubs: Software Engineering Club, Stevens Cyber Defense Team

EXPERIENCE

Software Engineering Intern

Jun 2018 – Aug 2019

Almo Corporation

Philadelphia, PA

- Streamlined partner sales by building automation software using Microsoft's .NET Framework to process **\$500,000+** in purchase orders, effortlessly updating shipping progress, and leading to reduced errors and significant cost savings.
- Bolstered IT ticket response rates by **20%** using SQL queries which generated monthly vendor reports and provided insight into the IT team's ticket-response rates, enabling data-driven decision-making and enhancing operational performance.
- Designed and deployed several web pages for our self-service web portal using ASP.NET, jQuery, and Bootstrap, enhancing employee productivity and reducing repetitive workloads for our Human Resource representatives.
- Increased awareness of security threats by responding to help-desk tickets regarding phishing attempts.

PROJECTS

OAPEN Suggestion Service | Python, SQL, Express, Docker, DigitalOcean

- Developed a recommendation engine with a team of fellow seniors for the OAPEN Foundation to suggest similar books, articles, and journals based on the semantic content of each publication.
- Utilized natural language processing techniques with NLTK, pandas, and NumPy to filter irrelevant content from a library of **30,000+** publications and generate statistical distributions of only meaningful word occurrences.
- Built an Express API which used SQL queries to serve pre-processed data from our Postgres database to provide results in fractions of a second.
- Automated the deployment of each service component to DigitalOcean droplets through Docker Compose and CI/CD.

SneakSnitch | Python, Flask, DynamoDB, AWS

- Generated a revenue stream of **\$400/mo** by pioneering a first-of-its-kind RESTful API enabling programmatic access to information about popular sneakers, aftermarket prices, and upcoming release dates for brands like Nike and Adidas.
- Scheduled web scraping tasks with Amazon CloudWatch and AWS Lambda functions to ingest new release data and product catalogs from vendor websites to the DynamoDB database.
- Deployed, secured, and optimized the necessary network infrastructure on AWS to ensure elasticity and JIT-scaling.

Py-Gutenberg | Python, Github Actions

- Created a widely-used open-source Python module that grants programmatic access to the Project Gutenberg library, garnering over **2,000 users** in only two months, with daily continuous growth.
- Streamlined unit testing and refactoring by leveraging **continuous integration** workflows with Pytest and Black.
- Automated the **continuous delivery** of versioned releases to the PyPi software repository through the use of Github Actions, mitigating the need for manual input and saving hours of time.

Incognito Music Streaming | React, MongoDB, Redis, Firebase

- Designed an alternative music and podcast single-page application using React and MUI, allowing users to curate playlists, browse new releases, and search for artists and tracks without listening interruptions.
- Used MongoDB and Redis to cache site data, increasing page speed by **250%** and minimizing Spotify API calls.
- Utilized Firebase to manage user accounts and store Spotify API access tokens securely with JWT tokens.

SKILLS & CERTIFICATIONS

Languages: C#, JavaScript, Python, C++, Java, SQL

Certifications: AWS Certified Cloud Practitioner

Frameworks: Microsoft .NET, Node.js, React, Angular, Bootstrap, NLTK, pandas, NumPy, Flask, Django

Technologies: AWS, Git, Docker, REST APIs, Firebase, DigitalOcean, MongoDB, Redis, Linux, Windows

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