

Daniel Tkachov

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Experience

Junior Software Engineer, Via Scientific – Cambridge, MA Aug 2023 – Dec 2023

- Equipped SaaS platform with OpenTelemetry to prevent service outages and to track bandwidth costs
- Integrated third-party data storage for streamlined data migration onto company servers
- Built React-based search interface for efficient navigation of company's diverse offerings
- Engineered comprehensive unit and end-to-end tests, enhancing SaaS webUI reliability and performance

Education

Boston University – Bachelor of Science in Computer Science May 2023

Selected Coursework: Computer Networking, Full Stack Development, Advanced Algorithms, Algorithm Design, Software Engineering, Databases, Functional Programming, Intro to Artificial Intelligence

Projects

Linux Boot Loader Customization Tool Jun – Jul 2023

- Programmed a user-friendly interface for customizing the appearance of the GRUB Linux startup process
- User can switch out themes and wallpapers with 2 clicks, reducing the time it takes to change settings
- Implemented using Rust and HTML/CSS/Javascript using the Tauri framework

Chaotic Attractor Web Simulation Mar 2023

- Developed and deployed a web-based simulation showcasing the behavior of a chaotic attractor
- Leveraged Three.js to render the chaotic attractor in real-time, dynamic 3D with various color schemes
- Implemented using HTML/CSS, Javascript, and Three.js

Routing Protocols Implementation Nov 2022

- Implemented link state and distance vector protocols in a simulated internet protocol stack
- Delivered packets across topological map while simulating congestion and router downtime
- Created using Java

COVID-19 AI Model Dec 2021

- Programmed an AI model that distinguished between X-rays of COVID, pneumonic and healthy lungs
- Correctly diagnosed 92% of X-rays between Covid and Non-Covid patients
- Utilized Tensorflow, Keras, and Python

Photo Sharing Website Apr – May 2021

- Deployed a photo sharing website where users could interact with photos and build a friends list
- Developed SQL backend that allowed uploading, tagging and captioning images with search capabilities
- Created using SQL, Python, HTML/CSS, and Flask

Social Media Stock picker Jan 2021

- Prototyped a stock picking service that gave investment advice based on social media sentiments
- Advised stocks with positive sentiment based on real-time tweets
- Created with peers during the Hack The Northeast 2021 hackathon using Python, NLTK, and Tweepy

Skills

Languages: Javascript, Rust, Python, C++, HTML/CSS, Java

Technologies: Docker, Neo4j, SQL, Node.js, Tauri, React, Linux, OpenTelemetry, Grafana, Prometheus, Jaeger