

Garrett Halstein

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WORK EXPERIENCE

IBM, Poughkeepsie, NY

Full-Stack Software Engineer, 11/2019 - Present

- + Led the migration of the 32 bit Operation Server Java/Eclipse RCP Console for the z/TPF OS to the 64 bit architecture.
- + Led development of a full-stack learning platform on the department's linux server with React, Node, Express and IBM Cloud services. Designed and added features based on what customers and new hires desired.
- + Integrated automated customer website monitoring with python scripts.
- + Replaced deprecated API functionality and added new UI features to the 64 bit Java/Eclipse RCP console.
- + Debugged client issues and added features as needed to the RAVEN OO-REX and TOS Java console clients.
- + Loaded, packaged and shipped the builds for the TPF lab and improved efficiency with automated Shell and Python scripts.
- + Worked in an Agile space with a frequent and continuous deployment process in the Systems Monitoring and Analytics squad.

YouTube, Remote

Coding and Software Engineering Content Creator, 3/2020 - Present

- + Amassed a subscriber base of over 2,300 individuals interested in software engineering.
- + Created more than 50 hours of content to help teach and mentor software engineers.
- + Designed a beginner friendly data structures and algorithms video series by breaking down difficult concepts.
- + Created in-depth programming tutorials that help learners of all levels understand concepts.

ConnectiveRx, Whippany, NJ

Software Engineer, 5/2019 - 11/2019

- + Led development and maintenance of the technology-enabled biopharmaceutical company's API.
- + Developed and maintained serverless API's and microservices with Golang on AWS Lambda.
- + Deployed and managed builds on Microsoft Azure, and used git for version control.
- + Handled inquiries for clients by interpreting data payloads in Amazon DynamoDB.
- + Worked in an Agile environment with two week sprints in the development process.

TECHNICAL SKILLS

Java, Python, JavaScript, Node, React, D3, IBM Cloud Services, Eclipse Enterprise Development, Golang, Ruby, Rails, Typescript, AWS Lambda, REX, Assembler, Pandas, SQL, XML, Redux, MVC, HTML, CSS, Git, Unix, Linux, C/C++, z/TPF, z/OS, PostgreSQL

TECHNICAL PROJECTS

Comprehensive Analysis & Research Tool for College Admissions - [Github](#) | [Demo](#)

Aggregates, analyzes and visualizes data for universities.

- + Developed a Flask backend in conjunction with Jupyter Notebooks.
- + Created an intuitive UI with multi-layered functionality using Angular.
- + Presented and designed full featured visualizations with D3 such as drill-down charts, bubble plots and other visualizations.

Furbook - [Github](#) | [Demo](#)

Social media platform for your pets based on Facebook.

- + Developed a Rails API backend with endpoints for users, posts, comments, pictures, friendships and messages.
- + Utilized JSON Web Tokens and local storage to store encrypted user information client-side and bcrypt server-side.
- + Used Active Storage, Google Cloud Platform and web services to upload and display media throughout the application.
- + Managed state and user experience with React and Redux for scalability.
- + Implemented the user interface with fully CSS styling.

Chello - [Github](#) | [Demo](#)

A clone of the list-making application, Trello, which is used to manage the life cycle of projects and the distribution of workloads.

- + Developed a Rails API backend with endpoints for users, projects, lists and tasks.
- + Utilized JSON Web Tokens and local storage to store encrypted user information client-side and bcrypt server-side.
- + Utilized components and their life cycles, props and states via React's structural hierarchy for scalability.

EDUCATION

Georgia Institute of Technology - Remote - 1/2020 - Present

- + Master of Science in Computer Science specializing in Computing Systems with a 4.0 GPA.
- + Relevant Courses: Software Development Process, Database Systems Concepts and Design, Software Architecture and Design, Software Analysis and Testing, Intro to Graduate Algorithms, Distributed Computing and Data and Visual Analytics.

Emory University - Atlanta, GA - 8/2015 - 5/2019

- + Bachelor of Science with a 3.6 GPA.
- + Relevant courses: Computer Science I/II, OOP-Methodologies, Data Structures, Algorithms, Database Management, Linear Algebra, Multivariable Calculus, Calculus based Physics I/II, and Quantum Mechanics.