# Joseph Michael Spitzer

https://sp1tz.github.io

## Education

- University of Massachusetts • M.S. Computer Science (3.97)
- University of Saint Thomas
- B.A. Computer Science (4.00) & B.A. Applied Mathematics (3.75)
  Magna Cum Laude graduate with a cumulative GPA of 3.89.

#### Skills

- Languages / Libraries / Frameworks: Axios, Babel, Express, Gin, Ginkgo, Go, Gomega, HTML, Jasmine, JavaScript / TS, Jest, Resty, Winston, LATEX
- Environments / Tools: Ansible (AAP / AWX / Molecule / Tower), cURL, Bash, Git / GitHub, ESLint / JSHint, Make, MongoDB, Node.js / npm / npx, Swagger, tmux
- Concepts / Protocols: BDD, CI/CD (GitHub Actions / Travis CI), Containers (Docker / K8s / OpenShift / Podman), Data Interchange (CSV / JSON / YAML), HTTP(S), ODM (MGM, Mongoose), OOP, REST, Unix OS (Fedora / macOS/ Ubuntu), WS(S)

### Experience

- Advisory Engineer at IBM (May 2022 Present) Continued as a back-end developer for containerized web services, though now in a full lead capacity. Designed, developed, and maintained critical applications for our broader department. A first being an automation integration service, which built a convenient bi-directional abstraction between the Ansible<sup>®</sup> Automation Platform & OpenShift<sup>®</sup>. This allowed application & automation developers alike to provide self-service solutions to end users in a standardized manner, eventually made accessible through Slack and an intranet portal. A second service provided management of, and access to, auxiliary aspects of virtual machines. This included digital certificates, middleware, and compliance scans. Such was consumed by a front-end view, so to give users more complete insight into their private cloud deployments.
- Staff Engineer at IBM (May 2021 April 2022) Software engineer within the CIO organization, which provides IT services to internal employees. A core contributor on a few applications with a focus on middleware, cloud, and web technologies. In particular, co-lead development of a proxy server containing an API gateway to facilitate the migration off of a legacy monolith. Additionally, the primary back-end engineer on a micro-service-backed web application providing automated server management through Ansible<sup>®</sup> Tower. Our software is used to support virtual and physical infrastructure for thousands of IBMers and is hosted on the RedHat OpenShift<sup>®</sup> Platform.
- Graduate Intern at Nokia Bell Labs (June 2020 August 2020) Member of the group researching the orchestration of teams of heterogeneous autonomous robots, which are often present in a factory or warehouse setting. Designed a finite-state machine for the centralized orchestrator to foresee and prevent potential collisions of robots. Implemented the design in Go, utilizing simulation software.
- Graduate Research Assistant (September 2018 May 2020) Collaborator of the research lab studying programming languages and compilers.
  - AAAI Conference Publication: https://doi.org/10.1609/aaai.v34i09.7065
  - GitHub Code Repositories: ocelot-ide/ElementaryJS, ut-amrl/robo-js
- Software Engineer II at Veritas Technologies (June 2017 August 2018)
- Software Engineer I at Symantec Corporation/Veritas Technologies (June 2015 May 2017)

#### April 2024 spit5921@comcast.net ###-####

Amherst, MA 09/2018 - 02/2021 Saint Paul, MN 09/2010 - 05/2015