Seth J. Rothschild

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Summary

Senior Software Engineer with Ph.D in Mathematics and six years experience in Engineering Leadership and DevOps. Track record of excellence in project leadership, mentorship, gathering requirements, reviewing patents, and delivering code to production. Open to technical leadership, software engineering, or software management roles.

Experience

Senior Software Engineer | Dell Technologies Office of the CTO

2018-Present

- Technical lead on COO-commissioned 58 person AI LLM project. (2023)
 - Designed project-wide architecture, build, and deployment strategy. Mentored staff in software design, engineering practices, and technology choices.
 - Managed an 8 person ops team. Dramatically improved application uptime, monitoring, and robustness.
- Technical lead on CTO software engineering team of 20 people.
 - Solve ambiguous problems with cutting-edge technology and build production code as an organization of last resort. Worked in AI/ML, cryptography, quantum computing, and data management.
 - Guided team on prioritization, project design, technical direction, and quality. Improved team Extreme Programming Agile practices such as pair programming, test driven development, and rapid iteration.
- Drove DevOps tool creation, selection, and adoption.
 - Go-to SME on infrastructure-as-code, CI/CD, private and public cloud, Docker, SSO, certificates, networking, and improving the developer experience. Managed our team's servers, containers and VMs.
- Recognized as research leader in Dell Technologies.
 - Authored 6 granted patents, 12 patents pending. Patent committee member for Pan-Dell patent proposals since 2020. Member of 4 person committee to evaluate Quantum patent proposals since 2024.
 - First from Dell nominated and invited to attend highly competitive Frontiers of Engineering conference.

Research Scientist | Feature Labs Inc.

2017-2018

- Represented MIT in D3M, a DARPA project for automated AI/ML discovery.
- Contributed to Featuretools project (7k stars on GitHub).

Teaching Assistant | Tufts University

2012-2017

• Awarded Graduate Institute for Teaching Fellowship 2015.

Software Skills

- AI/ML: Dask, Featuretools, JupyterLab, Keras, NumPy, OpenCV, PyTorch, Scikit-Learn, TensorFlow, TGI
- Full Stack: Python (Authlib, Black, Click, Django, Flask, Flake8, Hypothesis, MyPy, Pytest, Requests, Sphinx, Urllib3), Javascript (Elm, React/Redux, Svelte), Go, SQL (MySQL, Postgres, SQLite), C
- DevOps: Scripting (Ansible, Bash, Python, SSH), CI/CD (Concourse, GitHub, GitLab), Containers (Docker, K3s, Kubernetes), IaC (ESXi, LXD, Proxmox, Terraform, vSphere), Cloud (AWS, GCP, VMWare Tanzu), Monitoring (Grafana, Prometheus), Proxying (Caddy, NGINX, HAProxy)
- Misc: Emacs, Vim, Git, Linux, OSX, LaTeX, GitHub Copilot

Education

Doctor of Philosophy, Mathematics | Tufts University

2012-2017

• President - Organization of Graduate Students in Mathematics (OGSM) at Tufts

Bachelor of Science, Mathematics | Syracuse University

2008-2012

• Minor in Physics, Renée Crown University Honors Program