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STEPHEN CASEY

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EXPERIENCE

Software Engineer II - Shared Services | Vertafore, Inc. **Mar 2024 - Present**
- Developed & maintained the core microservices platform, including authorization, licensing, eventing, configuration, and scheduling services, leveraging Spring, Java, React, Typescript, Python, .NET, Kafka, Redis, PostgreSQL, Kubernetes, K9s, and AWS.
- Designed & implemented identity management via infrastructure-as-code for next-gen products, legacy products, and external partners, including custom policies & adapters, token exchange, OAuth2, JWT, OIDC, MFA, SAML, and LDAP.
- Architected and developed multiple full-stack solutions, implementing responsive React-based front-end applications, Backend-for-Frontend (BFF) systems, and secure, scalable, and resilient RESTful APIs.
- Regularly facilitated cross-functional collaboration in an Agile environment across UX, product management, front-end, and back-end teams to efficiently deliver seamless, scalable, and user-friendly enterprise solutions.
- Personally owned PingDirectory, the directory service containing all Oauth clients, infra users, and 1M+ end users.
- Developed Ansible scripts for automating cloud infrastructure build, deployment, and verification processes.
- Spearheaded company-wide CI/CD process changes, using GitLab CI, Docker, and Gradle to automate and streamline development, deployment, and verification workflows.

SDET I - Shared Services | Vertafore, Inc. **Feb 2022 - Mar 2024**
- Served as the primary SDET & QA for core microservices, leading the development and execution of a comprehensive testing strategy of unit, service-level, integration, API, end-to-end (E2E), manual, and performance testing.
- Designed and implemented multiple greenfield automation test frameworks for API, E2E, load, and performance testing, leveraging Gitlab CI, Playwright, Junit, Spring test, React Testing Library, Locust, Cypress, REST-assured, & Selenium
- Led a company wide learning session on API testing and test code generators, empowering teams with best practices.

Research Associate | University of Florida, SFRC Ecohydrology Lab **June 2013 - Oct 2016**
- Developed statistical algorithms to extract stochastic features of temporospatial data sets with MATLAB, Python, and R.
- Communicated insights in two peer reviewed articles which together have been cited by over 40 others.

PERSONAL PROJECTS

Periodic - An automated photo sharing app for sharing seasonal or yearly highlights
- Built using Angular with Django REST Framework & PostgreSQL, secured with Okta OAuth2, deployed on AWS EC2 using Terraform.

Landscape Patterns - An interactive, real-time stochastic modeling app
- Created with Python, Dash, and Docker and deployed on AWS Elastic Beanstalk.

EDUCATION

M.E., Environmental Engineering Sciences | University of Florida | 4.0 GPA **Dec 2012**
B.S.M.E., Mechanical Engineering | Florida Atlantic University **May 2010**

CERTIFICATIONS

AWS Certified Cloud Practitioner | Amazon Web Services Dec 2021
Deep Learning Specialization | DeepLearning.ai via Coursera Oct 2021

PUBLICATIONS

1. **Casey, S. T.**, Cohen, M. J., Acharya, S., Kaplan, D. A., & Jawitz, J. W. (2016). Hydrologic controls on aperiodic spatial organization of the ridge–slough patterned landscape. Hydrology and Earth System Sciences, 20(11), 4457-4467.
2. Acharya, S., Kaplan, D. A., **Casey, S. T.**, Cohen, M. J., & Jawitz, J. W. (2015). Coupled local facilitation and global hydrologic inhibition drive landscape geometry in a patterned peatland. Hydrology and Earth System Sciences, 19(5), 2133.