Alex Tecce

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EXPERIENCE

Service Architect, URBN October 2018 - Present

- Maintained internal catalog Django app which allow merchandisers to publish new products to our eCommerce platform
- Maintained set of Go ETL's deployed on GCP which are delivered to vendors to notify them of new products
- Built a Terraform provider for Akamai's Global Traffic Management
- Architected a Contentful proxy in Go which reduced the payloads by a factor of 20 and targeted our Global Promos which handles tens of millions of requests per day

Senior Software Developer, IQVIA 2018 - October 2018

- Designed a data validation tool for a major version upgrade of our .NET web app
- Designed an API over our in house data warehouse with multiple use cases (in particular a gRPC service, a web service that serves an Excel extension powered by Vue, and a Powershell client)

Software Engineer, Fidelity 2017 - 2018

- Maintained and added features to the eMoney .NET web app
- Maintained the simulation engine which projects the client's financial scenario out until death and is run 1000 times with random seeding to generate a Monte Carlo method

EDUCATION

University of Colorado at Boulder, studied Mathematics and Computer Science. Some graduate coursework in Mathematical Statistics and Natural Language Processing

ACADEMIC WORK

Software, Lead Project MarsOASIS

Designed the systems software for an autonomous greenhouse with a plethora of sensors and actuators controlled by a BeagleBone Black (https://beagleboard.org/black) used to conduct research by NASA for food production on Mars. Wrote drivers and daemons and then used that to administer the system and automate the regulation of the environment. Posted the data to a backend in for a frontend team to pick up.

Project URL: https://github.com/atecce/MarsOASIS

SKILLS

- Working from the shell and scripting with languages like bash, Powershell, and Python

- Using IDE's like Visual Studio, IntelliJ, and Xcode and maintaining large object-oriented projects that scale to model business domains with languages like Java, C#, and Swift

- Creating revision controlled and reproducible environments for CI/CD pipelines with tools like git, Docker, and Jenkins

- Capturing the state of configured infrastructure with tools like Puppet and deploying configuration changes with tools like Ansible

- Daemonizing and managing processes locally in a Unix environment with tools like systemd and launchd or deploying them to revision controlled public cloud infrastructure like AWS, GCP, and Azure with Terraform

- Monitoring deployed services with logging stacks like ELK, and metrics tools like Prometheus and Grafana

- Using Vue to build rich SPA's in the browser

PERSONAL WORK

investigations

Wrote an ETL which scrapes www.lyrics.net for its content to pursue my interest in Natural Language Processing (surprising lack of corpora for song lyrics). The project models the domain as a tree (artists -> albums -> songs) and then concurrently traverses it with depth-first-search to scrape the content. Uses very fine-grained concurrency primitives right now and the TODO is to simplify things with a worker queue listening on a channel. Need to add a README. Typically deployed on a GCP compute instance with systemd

Project URL: https://github.com/atecce/investigations