J. Luke Scott

Backend Staff Engineer

+1 206 324 0184

luke@cron.works

Skills

Years of experience in parentheses

Code: Java (21), Python (13), Kotlin (2), HTML/CSS/Javascript (14), AngularJS (3), C/C++(3), Ruby (1)
FWK: Spring (12), DGS/GraphQL (1), Flask (2), Django (1)
Data: MongoDB (11), PostgreSQL (4), MySQL (6), Oracle (4)
Mobile: Android Java SDK (1)
Misc: Linux (20), Apache HTTP (8), Nginx (4), Git (13), Maven (9), Gradle (3)

Professional

Squarespace   2019-Current

Senior Engineer, Website API
• Lead engineer for a Spring/Kotlin/DGS flagship service providing the main entry point for Website related data.

Senior Engineer, Microservices Platform
• Project lead for a new Elasticsearch cluster and API wrapper service to replace our aging on-prem cluster. Started from my own initial idea, I created architectural and project plans, pushed for approval up to the director level, and led the project from inception to production deployment. Collaboration was required with four additional teams.
• Architectural and feature work for our in-house microservice framework, including a ground-up redesign in 2021.

Senior Engineer, Billing Systems
• Feature work and architectural improvements for in-house billing/invoicing system, using Stripe as payment gateway
• End to end work on tax vendor integration project, including RFC, POC, architecture review, driving consensus among stakeholders and partners within the company, and roll-out of implementation, tooling and team processes

Technologies: Java, Spring, Kubernetes, Gradle, Drone, Kotlin, Groovy, MongoDB, PostgreSQL

The Walt Disney Corporation   2016-2019

Lead Engineer, Foundational Technologies
• Lead engineer for a Tier-1 privileged access management application; led AWS architecture & migration effort.
• Lead engineer for a Tier-0 API gateway/datacenter traffic management system for Disney Parks and core services.
• Lead engineer for an integration tool used for auditing system access changes during the Fox acquisition.
• Occasional contributor to Disney's OAuth2 implementation, used for internal, external and service authentication.

Technologies: Java,Spring, AWS, Flux/NIO, REST, Multithreading, MongoDB, SOA, JUnit/Mockito, Python

Gates Archive (Rooster Park Consulting assignment)   2015-2016

Architectural and technical consulting, Python/Java/Spring/AngularJS development
• Created a web application to de-duplicate 1 million images using fuzzy hashing and fluid user interfaces. Required significant communication, vision and self-guidance to enable non-technical users to conquer a nebulous goal.
• Presented the de-duplication application at Northwest Archivists Conference in April 2016.
• Built a text extraction and topic analysis engine to summarize content in a 20TB collection. Recursively extracts arbitrary file formats until textual content can be examined and aggregates results at the text, file and corpus level.
• Assisted the media capture team by providing command line (Python) tools to enforce format/metadata consistency, plug-ins for Digital Transitions' Capture One scanning system, and general file synchronization and bit-level checks.
• Packaged four in-house applications using Vagrant and created a nightly build system to spin up sandbox environments.

Technologies: Java, Spring, Python, MongoDB, Active Directory, REST, AngularJS, Bootstrap, Jekyll, Vagrant

Basque Center for Climate Change (long-term, part-time consulting)   2014-2016

Architectural and technical consulting, Java/Spring/AngularJS development
• Re-designed UI, project and service architecture and build and deployment systems for the k.LAB modeling platform.
• Re-implemented the k.LAB GIS data management and collaboration tool, which organizes, tags, and secures uploaded data. Vector data sets are indexed via PostGIS and all data is published to an internal GeoServer via REST API.
• Technical and teaching assistant for the International Spring University in Bilbao, Spain every April.

Technologies: Java, Spring, Python, MongoDB, PostgreSQL/PostGIS, LDAP, REST, JUnit/Mockito, AngularJS, Bootstrap

The Walt Disney Corporation (contract through Altasource Group)   2013-2015
Senior Engineer, Core Services
- Wrote and maintained REST service and test code for Disney's core SOA serving mission critical requests at scale.
- Led multi-team investigations into outages and performance issues to address flaws in production code.
- Helped determine architectural direction and long-term strategies for refactoring, cleanliness and maintenance.

Technologies: Java, Spring, REST, SOA, JUnit/Mockito, Python

Amazon.com   2010-2011
Java/REST development on Amazon Prime SDET team
- Developed and maintained Java test platform using HTMLUnit/Selenium, Ruby, Python, and proprietary SOA.
- Highly involved in code and architecture reviews; constantly balanced competing priorities and deadlines.

Technologies: Java, REST, SOA, HTMLUnit/Selenium, Ruby, Python

Decision Health   2007-2010
Full-stack LAMP development, SOAP, DB and Linux admin
- Completely rewrote internal CRM system
- Contributed the Temporal Data Extension to the open-source Doctrine ORM project.

Technologies: PHP, Cake MVC, Doctrine ORM, SOAP, MySQL, RHEL5 Linux administration

CronWorks Software   2005-2007, 2010
Custom software development for various clients
- Provided technical analysis for SERVES toolkit at EarthEconomics; built a Django-based data management component.
- Advised T-Mobile Real Estate Acquisition group on architectural decisions and selection of a Java development team for the replacement of five internal systems.
- Managed development of FamilySnap social network.
- Developed Equity Spring real estate appraisal application.

Technologies: Java, MySQL, Python, Django MVC, PHP

Cúram Software   2000-2005
Java/J2EE and database development
- Implementation of large-scale software projects in Human Services program management, including Social Security, Unemployment Insurance and Medicare/Medicaid.
- Complex subject matter and highly politicized environments required communication and execution under pressure.

Technologies: Java (J2EE with model-driven code generator), Rational Rose, Oracle 9i, MS SQL Server, ASP/HTML

Education

University of Luxembourg   2011-2013
MSc, Computer Science
- Theoretical Computer Science; Java, C, and Python development.
- **Thesis title:** *A method for coordinating unrelated space-time topologies in multi-agent, multi-scale simulations*. Project included building the agent subsystem for k.LAB in Java (See cron.works/projects.html).
- **Course Content:** Strong focus on CS fundamentals, mathematical theories, and logical proofs. Included Intelligent Agents, Machine Learning, Theoretical Mathematics, Cryptography, Distributed Systems, and Communication Theory.

Technologies: Java Core libraries, Android SDK, AspectJ, Neo4J, others; C CUDA GPU SDK, MPI parallel processing SDK; Python Sage mathematics library, matplotlib, Gnuplot.py

University of Washington   1996-2000
BA, Economics; also took courses in Computer Science, Physics, and Information Management.

Personal Projects
- **Personal Datacenter Automation:** Python libraries and Debian-based build/deploy system for my personal servers
- **Automated Timelapse Capture:** Historical/archival project to capture footage of my neighborhood as it changes over time. Primary component is a mounted airtight case with a digital SLR, Raspberry Pi, WiFi, and temperature sensor. System also downloads full weather data for every picture taken and saves results in MongoDB.