

Galen Scovell

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EXPERIENCE

Senior Software Engineer

PayScale, Inc. | 02/20 – Now

- Implemented custom user policy system for managing paid public API users on high-traffic, Azure AKS .NET Core service. Tracks usage and limits access/request payloads across all available endpoints using a performant middleware with cache architecture.
- Migrated multiple high-traffic legacy services with no tests to scalable, fully tested Kubernetes .NET Core 3.1 services on Azure AKS.
- Lead developer, service for intelligently matching job titles and descriptions to internal compensable factors (eg skills, certifications, education). Python FastAPI Kubernetes service on Azure AKS, composed of varied resource-intensive Data Science model systems.
- Designed and implemented TeamCity scheduled task system for Data Science team that utilizes templates, virtual environments, cloud agents, and encrypted secrets process for efficient development in Python.
- Mentored junior developers; testing, service design, documentation, debugging, coding standards.

Software Engineer II

PayScale, Inc. | 05/17 – 01/20

- Created process for building and deploying all facets of PayScale internal data. Critically used by every team, both internal and customer facing.
- Designed and implemented ETL pipeline for customer profiles from legacy, deeply nested XML blobs in SQL to flattened JSON in Snowflake data warehouse. Processes 30mm profiles per day.
- Lead developer, conversion of highest traffic legacy on-prem service to scalable Azure webapp with stateless task architecture. Generates compensation reports critical to all PayScale products, handling 10mm+ reports per day.
- Conducted interviews covering algorithms and debugging for my team and others.

Software Engineer I

PayScale, Inc. | 12/16 – 04/17

- Lead developer, service handling Market Differential Analysis across PayScale products. Utilizes parallelized worker task architecture to run computations spanning hundreds of thousands of Labor Market/Job combinations.
- Created service handling storage and retrieval of customer job description metadata and files used across multiple PayScale products.
- Designed and implemented system for maintaining, constructing and querying PayScale Elasticsearch indices vital to both Consumer and B2B products. Handles 30mm+ queries per month.

Data Science Engineer

PayScale, Inc. | 07/15 – 11/16

- Created serverless, performant NLP feature extraction pipeline for inferring topics and skills from uploaded job description files of varying formats.
- Led build and release of PayScale's core compensation model for four quarters, compressing complex manual process into automated scripts.
- Created web app for matching job description files with customer internal job titles, decreasing onboarding time and forming an integral part of the data science pipeline.

PERSONAL PROJECTS

Kube

github.com/galenscovell/kube

- Emulation console built out of wood with a UI based on the Nintendo Switch
- Powerful enough to run modern console emulators, in a PS4-sized package
- Interface uses Typescript Electron and HTML/CSS combined with PowerShell scripts for seamless launching, closing and pausing of games across various emulator executables
- Constructed out of poplar and black walnut using only woodworking hand tools and a drill

Kage

github.com/galenscovell/kage

- Language learning Electron app focused on shadowing technique
- Takes in audio clips from any source as input, assembles them into sets, and presents them to the user using spaced repetition

Juso

github.com/galenscovell/juso-monogame

- Under development 2D roguelite game created with a custom C# engine built on top of the Monogame framework
- Utilizes Entity-Component-System infrastructure, AI (behavior states, steering, pathfinding), hitbox colliders, tilemaps, render culling, particle effects, sprite animation, and much more

Cartographer

github.com/galenscovell/Cartographer-Scala

- Interactive generator of perfect mazes (with only one solution) in Scala using Prim's Algorithm

Pathfinder

github.com/galenscovell/Pathfinder

- Interactive demonstration of A* Pathfinding algorithms using Manhattan, Chebyshev and Euclidean distance equations

QuadTreeCollision

github.com/galenscovell/QuadTreeCollision

- Interactive demonstration of quad tree collision detection

Circuits

github.com/galenscovell/Circuits

- Android game written in Java using the LibGDX framework, based on the traditional Japanese game of Hashi wo Kakero

PROFICIENT C#, Python

FAMILIAR JavaScript/TypeScript, Java, Scala, PowerShell, SQL, HTML/CSS

TOOLS Azure, AWS, Git, Docker, Kubernetes, Linux, ElasticSearch, Redis, TeamCity, Octopus Deploy, .NET Ecosystem, Electron

CONCEPTS Web Development, Microservices, API Design, Automation, Testing, CI/CD, Agile

EDUCATION Bachelor of Science in Biology, University of Oregon