

Wentao Wei

Phone: +447537917300 Email: g2archie@gmail.com

Address: Manchester, UK

WebSite: <https://github.com/g2archie>

PERSONAL STATEMENT

Backend engineer with three years of professional experience building and maintaining scalable, resilient, high-performance systems. One year hands-on experience as a machine learning engineer. Skilled in partnering with multifaceted teams to steer product direction and introduce innovative solutions. Passionate about adopting cutting-edge technology.

PROFESSIONAL EXPERIENCE

Barclays

Sep 2020 - Present

Java Backend Engineer API Platform - Service Mesh Team

Radbrooke, Knutsford

Technologies: Spring Boot, RESTful APIs, Jenkins, Istio, JUnit, Mockito, SonarQube, Veracode, Docker, Kubernetes, Confluence, JIRA, Git

- Crafted 3 utility JARs, bolstering the company's toolset for developers. Maintained and enhanced 4 pivotal API SDK components, widely utilized by developers across the organization.
- Innovated and introduced 10+ new API endpoints, catering to diverse stakeholders: DevOps (deployment pipeline integration), testers (supporting burst tests), and end consumers.
- Played an instrumental role in executing intricate features, notably the overhaul of the API registry and the elimination of the MuleGateway from the service mesh.
- Authored unit tests for team-managed APIs, ensuring compliance with the bank's rigorous quality standards. Diligently updated dependencies and rectified vulnerabilities, guaranteeing pristine SonarQube and Veracode reports.
- Proactively mentored junior developers and testers, fostering skill development and knowledge sharing.
- Offered steadfast support to DevOps engineers and end consumers, ensuring seamless operations and integration.
- Curated exhaustive Confluence pages (Knowledge Base), ensuring easy access to critical information. Maintained meticulous records through detailed ticket comments, enriching git commits, and comprehensive README.md files.
- Orchestrated meetings and disseminated emails to apprise the DevOps execution team and other consumers of the latest updates and changes.

OSME Education Ltd

Jun 2023 - Present

Senior Software Engineer (Part-time) - Master's Degree Recommendation System

Remote

Technologies: Next.js, Django, MySQL, AWS, Python, Selenium, Scrapy, Docker, Kubernetes, Jenkins

- Developed a platform to recommend master's programs to students based on criteria such as undergraduate university, past degrees, GPA, and personalized interest statements.
- Engineered a Django backend focused on user registration and provided comprehensive RESTful APIs for user interactions and data management.
- Established a dedicated recommending service responsible for managing datasets of universities, programs, and user profiles.
- Designed and maintained a daily-running web crawler service using Selenium and Scrapy, ensuring continuous and up-to-date data collection from the top 400 QS-ranked universities.
- Leveraged the all-MiniLM-L6-v2 sentence similarity model to align user interests with program descriptions, enhancing recommendation accuracy.
- Designed a responsive frontend with Next.js, facilitating user interaction.
- Stored Docker images in Amazon Elastic Container Registry (ECR).
- Managed the Kubernetes cluster using Amazon Elastic Kubernetes Service (EKS).
- Implemented a CI/CD pipeline using Jenkins, automating the build, test, and deployment processes. Hosted Jenkins on an EC2 instance with Elastic File System (EFS) for persistent storage.
- Managed the application's database using RDS for MySQL.

PERSONAL PROJECT

UNet MRI Reconstruction(Deep Learning - Computer Vision)

Jun 2019 - Sep 2019

Machine Learning Engineer

- Researched, Implemented, and deployed a UNet2D2D(novel UNet model) for MRI image reconstruction. The model outperformed the previously proposed UNet2D1D model(2018) in SSIM value(range from 0 to 1) by 0.1.
- Refactored the legacy code to Tensorflow Keras Model and developed a tool to manage the training task to run 24/7. Supported multiple models, and allowed to configure hyperparameters in just one file.
- Github: <https://github.com/g2archie/UNet-MRI-Reconstruction>

EDUCATION

University College London

Sep 2018 - Sep 2019

MSc Scientific Computing

University College London

Sep 2015 - Jun 2018

BSc Computer Science

TECHNICAL SKILLS

- **Languages:** Java, Python, JavaScript, Go(Beginner)
- **Frameworks:** Spring Boot, Django, Flask, Tensorflow, Scrappy, Selenium, Next.js
- **Database:** MySQL, Oracle Database, MongoDB
- **Architectures:** Microservices, Service Mesh
- **Tools:** Jenkins, Git, JIRA, OpenShift, Docker, Kubernetes, Google Cloud, AWS