JOEL GAO

Amsterdam, Netherlands

📞 +31-657109322 ✉ gaozhaohan22@gmail.com in Linkedin Profile ⌘ Github Profile

Education

Universiteit van Amsterdam & Vrije Universiteit   **09/2024 – 08/2026**
Master of Science in Computer Science   *Amsterdam, Netherlands*

Northeast Normal University   **09/2019 – 06/2023**
Bachelor of Engineering in Software Engineering   *Changchun, China*

Experience

NIO   **12/2024 – Present**
Data Engineer Intern   *Amsterdam, Netherlands*

- Write PySpark scripts and SQL to develop ETL pipeline.
- Develop and maintain the BI dashboards.
- Establish API connections between the data warehouse and multiple platforms.
- Optimize the performance of the system by rewriting and rescheduling the pipelines. Cut down 70% API calls of a task.
- Collaborate with colleagues across different departments and countries to understand and satisfy their data requests.

BO5 - online marketing   **09/2024 – 11/2024**
Software Engineer   *Veldhoven, Netherlands*

- Worked as a freelance full-stack developer for the Dutch company based in Veldhoven remotely.
- Developed a web bot to crawl contents from the input URLs and generate new blogs using OpenAI's API and Python.
- Connected the web bot to MongoDB and WordPress. Created a web interface to manage the generated blogs
- Deployed the web bot to the AWS EC2 instance using Docker. Automated the deploying process using Jenkins.

Jack Technology   **07/2023 – 07/2024**
Software Engineer   *Taizhou, China*

- Developed and maintained full-stack applications using Spring Boot for the back end and Vue.js for the front end.
- Designed and implemented CI/CD pipelines using Jenkins. Used Docker to deploy and manage the apps.
- Took part in refactoring an app. Participated in designing the app's backend architecture.
- Upgraded the app's middleware. Used Redis to optimize the API performance, reducing response times by 40%
- Upgraded the front-end tech stack of the app from JSP to Vue.js and implemented a new UI.
- Developed the ETL pipelines. Wrote scripts to automate the pipeline. Create reports using BI tools

Projects

Azure End-To-End Data Engineering Project   **02/2025**

- Create Azure Data Factory, create dynamic data pipeline to pull data from Github API to Azure Data Lake.
- Establish Azure Databricks cluster. Use Databricks notebook to write PySpark scripts for data transformation.
- Use Azure Synapse Analytics to do big data analysis. Integrate Data Warehouse with PowerBI.

Food Delivery App DevSecOps Pipeline   **08/2024**

- Developed a full-stack food delivery application using MongoDB, Express.js, React.js, and Node.js.
- Ensured the application's security and quality through Trivy and SonarQube.
- Deployed Prometheus and Grafana on AWS EC2 instances to monitor the status of the Jenkins server.
- Created Kubernetes cluster by using AWS EKS. The application was deployed on the Kubernetes clusters to ensure the robustness of the project.
- Automated the whole CI/CD pipeline using Jenkins.
- Deployed Prometheus and Grafana on AWS EC2 instances to establish the dashboard to monitor the status of the Jenkins server and the Kubernetes cluster.

Skills

Languages: Python, Java, JavaScript, SQL
Tools: AWS, Azure, Docker, Kubernetes, Linux, Ubuntu, Jenkins, Git, Spring Boot, Spring Cloud, React.js, Vue.js, Spark, Hadoop, Hive