JOSEPH DEMCHER

732.882.9385 | jobs@joedemcher.com | joedemcher.com

SOFTWARE ENGINEER

Resourceful, challenge-seeking Software Engineer with a track record of success leading internal and client-facing development projects from concept through delivery. Strong skill set with experience in full-stack development and enhancement of existing technologies using automated machine learning and data solutions. Proven background in leveraging advanced technical insight to create innovative systems and solutions that solve business needs and challenges. Collaborative team member who works effectively with cross-functional technical and operational teams to achieve project, client, and organizational goals.

Core Competencies & Technical Skills

Code Review & Optimization | Backend Engineering | Cross-Functional Collaboration | Data Science | Data Structures
Full Stack Software Development | Algorithms | Responsive Design | Global Team Collaboration

◆ ◆ ◆

Java | Python | Microservices | Amazon Web Services (AWS) | Kafka | Spring Boot | Maven | REST APIs
Jenkins | Swagger | OpenShift | Cassandra | Git | Docker | Airflow | Splunk | Agile/Scrum
SQL | NoSQL | Tensorflow | React | Pandas | Numpy | GraphQL | Go

RELEVANT PROFESSIONAL EXPERIENCE

Optum, Basking Ridge, NJ   **6/2020 – 8/2023**
Software Engineer   **7/2021 – 8/2023**
Promoted to software engineer role to support a streaming pipeline that processes 60M+ records weekly. Work closely with fellow engineers on data management via Kafka and microservices written in Java using Spring Boot.
- → Involved in the entire software development lifecycle (SDLC) including requirement gathering, user story creation, system architecture design, coding, testing, debugging, and production-level support.
- → Enhanced the streaming system by working with clients to create new Kafka producer and consumer applications for onboarding 8 new sources, as well as implementing features to the rule engine to transform raw system data.
- → Analyzed user feedback and worked with the product team to build a metadata object for a records management system, which provides real-time feedback on errors or warnings via Kafka topics and reduced errors requiring intervention by 35%.
- → Created hooks to automate and optimize code review, reducing overall time from commit to approval from 2 days to <1 day.
- → Designed and implemented an alert system in Prometheus, which is used by system reliability engineers to monitor data ingestion; resulting in a 90% reduction in application downtime.
- → Key contributor to the transition from on-prem services to a hybrid cloud environment on AWS delivering a 20% reduction in annual costs; designed a customizable mapper, reducing new source onboarding time from 2 months to 3 weeks.
- → Selected for a leadership role, providing training, mentoring, and coaching for new hires and interns.

Technology Development Associate   **6/2020 – 7/2021**
Hired to support various software engineering projects, working closely with senior engineers to ensure project success.
- → Collaborated with data scientists and engineers to shape a machine learning model, leveraging Tensorflow and Python, to measure the similarity of healthcare consumers resulting in prospective cost savings upwards of $10M.
  - o Applied innovative exploitation of data from TigerGraph and realized efficient data pre-processing with Pandas.
  - o Constructed a user-friendly interface using React for stakeholders to interact with the model and its analysis.
- → Implemented automation in Python for a data ingestion process for existing data stored in a data lake with Airflow; significantly reduced processing time from 3 weeks to 1 week. Supported the full ETL pipeline using Spark and MapReduce.

ADDITIONAL EXPERIENCE

Collabera, Basking Ridge, NJ   **5/2019 – 9/2019**
Data Analytics Intern   **5/2019 – 9/2019**
Developed a machine-learning model with other data analysts to automate the classification of 100K job postings annually.
- → Researched and evaluated machine learning algorithms and techniques and presented findings to stakeholders.
- → Collected and prepared training and validation datasets for model input and testing with Pandas in Jupyter Notebook.

EDUCATION

Master of Science, Data Science – New Jersey Institute of Technology
Bachelor of Science, Computer Science – New Jersey Institute of Technology
Certified Scrum Product Owner – Scrum Alliance