James Dorevski

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SKILLS

• Languages: Scala, Python, JavaScript, C++, SQL, Java Technologies: AWS, Play, React, Kafka, GCE

EXPERIENCE

carsales

Melbourne, Australia

Aug 2023 - Jan 2024

Software Engineer

• Sourcing: Sourcing is a product for car dealerships to help identify, manage, and purchase high revenue-generating stock. Worked with tech lead to architect novel component that facilitates B2B transactions between dealerships.

Junior Software Engineer

Jun 2022 - Aug 2023

- Global Inventory: Global Inventory is the batch ad ingestion system used by carsales, and global entities. Worked on refactoring monolith to microservice architecture, improved customer and developer UX by updating application framework, implementing self-documenting features, and introducing application performance monitoring (APM) features. Resulted in improved customer adoption, and reduced support requests on customer support team.
- Manifold: Owner of greenfield project that aims to provide a standard API for client interaction with carsales' services. Worked with senior engineer to plan work items and architect system for MVP, and oversaw delivery through MVP to continual development and introduction of new features. Manifold reduced maintenance burden on the engineering team, and decreased feature delivery time through test suite automation.
- Time-sheet automation: Assisted delivery lead with adoption of time-sheet software through Jira scripts that automated repetitive tasks. Improved integrations freed up time for management and developers, and reduced occurrences of inaccuracies and errors.
- Core Tech Talks: Founded internal developer guild aimed to provide colleagues opportunities to share learnings, demonstrate work, practice presentation skills, and improve cross-team collaboration in a fully-remote environment. Created and managed presentations, coding workshops, and social events.

Graduate Software Engineer

Feb 2021 - Jun 2022

- AutoGate: AutoGate helps dealerships manage their inventory, generate leads, and be informed of market trends through market-inspection tools. Worked on bug fixes and feature requests.
- o carsales SELECT: carsales SELECT allows customers to directly purchase selected stock from carsales, backed by an inspection program, and refund period. Worked on implementing functionality that allows dealerships to create and manage SELECT stock.

Coursera

Mountain View, CA

Senior Software Engineer

- Jan 2014 Oct 2016
- o Notifications: Service for sending email, push and in-app notifications. Involved in features such as delivery time optimization, tracking, queuing and A/B testing. Built an internal app to run batch campaigns for marketing etc.
- Nostos: Bulk data processing and injection service from Hadoop to Cassandra and provides a thin REST layer on top for serving offline computed data online.
- Workflows: Dataduct an open source workflow framework to create and manage data pipelines leveraging reusables patterns to expedite developer productivity.
- o Data Collection: Designed the internal survey and crowdsourcing platform which allowed for creating various tasks for crowdsourcing or embedding surveys across the Coursera platform.
- Dev Environment: Analytics environment based on Docker and AWS, standardized the Python and R dependencies. Wrote the core libraries that are shared by all data scientists.
- o Data Warehousing: Setup, schema design and management of Amazon Redshift. Built an internal app for access to the data using a web interface. Dataduct integration for daily ETL injection into Redshift.
- Recommendations: Core service for all recommendation systems at Coursera, currently used on the homepage and throughout the content discovery process. Worked on both offline training and online serving.
- o Content Discovery: Improved content discovery by building a new onboarding experience on coursera. Used this to personalize the search and browse experience. Also worked on ranking and indexing improvements.
- o Course Dashboards: Instructor dashboards and learner surveying tools, which helped instructors run their class better by providing data on Assignments and Learner Activity.

• Lucena Research Atlanta, GA Summer 2012 and 2013

Data Scientist

- **Portfolio Management**: Created models for portfolio hedging, portfolio optimization and price forecasting. Also created a strategy backtesting engine used for simulating and backtesting strategies.
- QuantDesk: Python backend for a web application used by hedge fund managers for portfolio management.

• Georgia Institute of Technology

Atlanta, GA

Research and Teaching Assistant

Jan 2012 - Dec 2013

- Research Assistant Machine Learning: Research on machine learning for portfolio hedging and replication algorithms. Modeling low-risk & continuous-return strategies. Developed the Python library QSTK.
- Teaching Assistant Computational Investing: The online course on Coursera, had more than 100,000 students enrolled. It was featured on the 11 Alive News and the Atlanta Journal Constitution. Involved in creating assignment, exams and conducting recitation sessions. Also taught the on-campus version of the course.

EDUCATION

• University of Wollongong

Wollongong, Australia Feb 2018 – Dec 2020

Bachelor of Computer Science, majoring in Software Engineering

• Wollongong IT Society (WITS) Executive: Helped organise student networking nights, social events, and Hackagong 2020

Projects

- QuantSoftware Toolkit: Open source Python library for financial data analysis and machine learning for finance.
- GitHub Visualization: Data visualization of Git log data using D3 to analyze project trends over time.
- Recommendation System: Music and movie recommender systems using collaborative filtering on public datasets.
- Mac Setup: Book that gives step-by-step instructions on setting up developer environment on macOS.