Akshay Chiwhane

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Experience

Anduril Industries Seattle, WA

Software Engineer – Platform Infrastructure (Live Data Systems) *May 2021 – Present*

- Reduced size of resource graph on customer deployments by up to 99% and enabled more-flexible user workflows through designing and implementing greenfield services backed by eventually-consistent replicated data structures (Go, FoundationDB, Kubernetes, NixOS)
- Improved read performance of in-house time-series database by 10x through implementing workflow-aware LFU caching (Go, Kubernetes)

DRW Chicago, IL

Senior Software Engineer – Risk Management *March 2019 – April 2021*

- Enabled novel, real-time analysis and event detection workflows by designing and implementing real-time derivatives risk decomposition system (Python, Elixir, Kubernetes)
- Redesigned and scaled existing settlement risk analysis pipeline using a functional, reactive architecture (Elixir, C++, Kubernetes)
- Managed and mentored apprentice to successfully deliver greenfield services from initial concept to production deployment (Elixir, Kubernetes, Typescript)

DRW Chicago, IL

Junior Software Developer – Trading Infrastructure *July 2018 – March 2019*

- Improved API response times of internal trade volume monitoring tool by 30x (Ruby on Rails)
- Implemented and integrated an LCH margin calculation tool into internal margin calculation framework to simulate portfolio margins under different market conditions (Clojure)

DRW Chicago, IL

Software Engineering Intern - Soybean Options Desk *June 2017 – August 2017*

- Provided insight into new trading strategies for agriculture options markets by building data analysis tools and high-throughput backtesting pipelines for traders (Python, numpy, pandas, slurm)
- Improved efficiency of trade capital monitoring system by writing Tableau Web Data Connectors (JavaScript, Flask)

Deepfield Networks Ann Arbor, MI

Software Engineering Intern *May 2016 – September 2016*

- Improved speed and robustness of critical part of DDoS (Distributed Denial of Service) attack detection pipeline by architecting, developing, and optimizing DDoS analysis library (Python)
- Gained familiarity with Agile and scrum (Atlassian Jira), test-driven development, and continuous integration methodologies (Jenkins)

Skills

Programming Languages: Go, C++, Python, Elixir

Frameworks/Technologies: Django, Tornado, Flask, Redis, Jupyter Notebooks, scikit-learn, pandas, numpy, etcd, MySQL, PostgreSQL, slurm, Hadoop, MapReduce, Kubernetes

Languages: English (native fluency), Marathi (native fluency)

Education

University of Michigan Ann Arbor, MI

B.S.E in Computer Science *September 2014 – April 2018*

- **Key Courses:** System Design in C++, Distributed Systems, Operating Systems, Networks, Web Databases & Information Systems, Machine Learning, Artificial Intelligence, Computer Organization, Data Structures and Algorithms, Linear Algebra, Probability