

Shea Garrison-Kimmel

SOFTWARE ENGINEER / DATA SCIENTIST | STOCKTON, CA

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Experience

Medallion

Remote

SENIOR SOFTWARE ENGINEER, TECH LEAD

Jan. 2023 – present

- Fast-tracked from L3 to L5. Currently tech lead of a core platform team, balancing leadership responsibilities with driving feature development in a Python (Django) + TypeScript (React) stack
- Designed and implemented an in-house, BPMN-compatible workflow engine to orchestrate the lifecycle of client requests, boosting gross margin, reducing turnaround times, and minimizing SLA breaches
- Championed and led the development of a customizable “Report Builder” to fill a core business gap. Persuaded leadership to build in-house (rather than purchase a third-party tool) with a working prototype, ultimately saving thousands per month and ensuring a seamless integration with the Platform
- Built an LLM-powered tool to extract and structure a provider’s data from their resumé, streamlining the onboarding journey and improving user experience

Factual (merged with Foursquare in April 2020)

Los Angeles, CA

SOFTWARE ENGINEER & DATA SCIENTIST

Aug. 2019 – Jan. 2023

- Owned and optimized revenue-critical big-data ETL pipelines, earning two promotions in just three years
- Spearheaded AWS optimizations that reduced costs by \$250k/month (>50%), cut end-to-end run-times by 75%, accelerated client deliverables, and eliminated SLA breaches
- Migrated legacy on-prem pipelines to AWS seamlessly, with no service disruptions or missed outputs
- Designed and deployed a distributed graph clustering pipeline capable of handling over a billion nodes and 10 billion edges
- Used a mix of Python, Scala, & Java to build Airflow & Luigi DAGs that run Spark, MapReduce, and Hive jobs, with additional experience in related tools such as PostgreSQL, Docker, k8s, and EMR

Caltech & UC Irvine

Pasadena, CA & Irvine, CA

EINSTEIN POSTDOCTORAL FELLOW & PH.D. RESEARCHER

Aug. 2009 – July 2019

- Published ~70 papers (9 as lead author) with ~15k citations. Presented my results at dozens of conference & colloquia. Secured \$350k+ in grant funding and 60M+ core-hours on NASA and DOE supercomputers
- Developed and tested models of dark matter and galaxy formation using massively parallel simulations

Education

University of California, Irvine

Irvine, CA

PH.D. IN PHYSICS & ASTRONOMY (Thesis: *Galaxy Formation in the Local Group*)

Sep. 2009 - June 2015

Haverford College

Haverford, PA

B.S. IN ASTRONOMY AND PHYSICS WITH A CONCENTRATION IN COMPUTER SCIENCE

Aug. 2005 - May 2009