James Salvatore Keener

jobs@jimkeener.com — +1-724-255-8218 — KC3NPJ

Employment

Software Engineer
Creativity.inc (Parent of Missouri Star)

Oct. 2020 - Current

Hamilton, MO (Remote)

- Created tooling to manage applications in docker locally and in a Kubernetes cluster.
- Leveraged Amazon Web Services' (AWS) EventBridge and Simple Queue Service (SQS) for reliable event processing
- Coördinated reporting between multiple subsidiaries, including Missouri Star Quilt Co.
- Built a datawarehouse and ETL tools using PostgreSQL to continuously ingest webhooks.
- Generated multiple GraphQL and REST libraries and databases from API definitions.
- Interfaced with shipping carriers to import package tracking information.
- Created services to interface with Shopify and other vendors using Laravel.
- Provided production support for many services.
- Interpreted problem reports quickly, turning reported symptoms into root-causes and proper solutions
- Spent time shadowing different processes to better understand and predict problems
- Optimized SQL queries for reporting (OLAP) and application (OLTP) use
- Centralized logging and metrics in order to build queries, dashboards, and alerts
- Coordinated with multiple teams to create end results that solve business problems
- Aided in defining the future architecture of applications

Software Engineer
Gridwise

Feb. 2020 - Sept. 2020
Pittsburgh, PA

- Designed and built multiple Go microservices utilizing PostgreSQL and Google Cloud PubSub.
- Improved database queries and data processing in a Ruby-on-Rails and PotgreSQL application.
- Extended a FastAPI-based Python and PostgreSQL application.

Software Engineer
Missouri Star Quilt Company

Feb. 2017 - Feb. 2020
Hamilton, MO (Remote)

- Consultated with users to improve interfaces and efficency
- Improved site search relevancy and indexing speed
- Helped define GDPR and PCI compliance tasks after reading the relevant standards
- Worked with vendors to resolve issues in a timely manner
- Worked on updating and expanding Laravel 4 and 5 PHP applications.
- Customized a Point-of-Sale system based on F/OSS to interface with existing databases and storage.
- Aggressively added promotion-aware caching to the ecommerce site
- Designed and implemented AWS-based infrastructure deployed via CloudFormation
- Built keyboard-driven Vue.js-based single-page applications for internal use

Software Engineer / Data Architect
LunaMetrics

May. 2015 - Jan. 2017
Pittsburgh, PA

- Taught clients how to write and conceive SQL queries through one-on-one consultations
- Acted as a technical resource for coworkers and clients
- Mentored new employees
- Coordinated and taught educational lecture series for coworkers
- Generated complex analytics SQL queries for Google BigQuery to tease out answers to client questions
- Converted event streams into structured data using Google Cloud DataFlow/Apache Beam (Java)
- Presented results of machine learning in non-technical document
- Performed Machine Learning to understand customer behavior with R, Python, and SQL
- Designed and built Java-based Google AppEngine apps for internal use

Education

Master of Science in Civil Engineering
University of Pittsburgh
Program: Transportation Engineering

Jan. 2013 - Dec. 2014
Pittsburgh, PA
Interests: Planning, ITS, & Alternate Transportation

Bachelor of Science — Aug. 2004 - Dec. 2008
University of Pittsburgh — Pittsburgh, PA
Majors: Mathematics & Molecular Biology — Minors: Computer Science & Chemistry

Volunteer Work

Member (Past President) — Sept. 2014 - Present
Allegheny County Transit Council — Pittsburgh, PA

Member, Cartographer, and Data Analyst — Aug. 2014 - Present
Pittsburghers for Public Transit — Pittsburgh, PA

Volunteer Coach — Aug. 2021 - Jan. 2023
Mt. Lebanon Township — Mt. Lebanon, PA
Pre-K, K, and 1st grade soccer, and 1st grade basketball

Some Projects

Very Small Logic Controller (VSLC)
Source
GDS View
Designed to go on TinyTapeOut and become a real Integrated Circuit (IC), this is designed to be a replica of a Programmable Logic Controller running a stack-based assembly language. The project is built with Verilog and OpenLane2, will "harden" (compile to a description of the silicon suitable for fabrication), and contains silicon art.

Transit-related Geospatial Projects
Visualizing System-wide Headway
Calculating Service Area
Analyzing Bus Routes to Find Transit Deserts
As a member of multiple transit advocacy organizations, I would perform as-needed Geospatial Information System (GIS) analysis, often using imported General Transit Feed Specifications (GTFS), US Decennial Census, US American Community Survey (ACS), and OpenStreetMap data. I also managed a PostgrSQL database with PostGIS and pg-routing installed for our research teams to use with QGIS.