Executive Summary

Manager with 5 years of experience (28 years overall) guiding teams through challenging conditions, ranging from technical challenges through COVID-19 related challenges. I have kept my team together, and we have thrived on the challenges of taking care of the data for a \$200 million company. Most importantly, all of this has been done while keeping an eye on our budget, making sure to keep our costs down to keep the company profitable right through COVID-19.

Relevant Technical Skills

- **Big Data:** Google Big Query, HDFS, Hive, YARN, Alluxio, Impala, Trino, Kafka, Kubernetes, Dagster
- Database Servers: MySQL, PostgreSQL, Microsoft SQL Server
- Database Skills: <u>PostgreSQL</u> Database Administration, Relational Schema Design, Structured Query Language (SQL)
- **Programming and Scripting Languages:** <u>Bash</u>, C/C++, <u>Java</u>, Javascript, <u>Perl</u>, PHP. Pvthon
- **Programming Skills:** <u>Docker</u>, <u>Jenkins</u>, <u>Jira</u>, <u>Intellij IDEA</u>, Object-Oriented Design, Object-Oriented Programming, Refactoring
- Software Configuration Management Tools: Git, GitHub, GitHub Actions, Mercurial, Subversion

Job History

EvolutionIQ - Senior Software Engineer

New York City, NY - Feb 2024 - Current

- Orchestrated <u>Google Cloud</u> infrastructure with <u>Terraform</u>, managing <u>GKE</u>, <u>BigQuery</u>, and developer virtual machines for scalability and efficiency.
- Redesigned EvolutionIQ's CI/CD pipeline, enhancing efficiency in development workflows.
- Fixed critical bugs in locally developed <u>GitHub Actions</u>, ensuring smooth and reliable environment promotion.
- Built a template repository to guide EvolutionIQ teams in using <u>GitHub Actions</u> for deployment, as well as setting up data pipelines with <u>Dagster</u>.
- Developed a Python-based CI/CD library to manage complex actions beyond <u>Bash</u>'s capabilities.
- Implemented <u>nektos/act</u> to enable developers to test build and deploy actions locally before committing to <u>GitHub</u>.
- Refined <u>data retention policies</u> to guarantee compliance and ensure critical data availability for legal requirements.
- Implemented SLA monitoring with <u>Grafana</u>, <u>SendGrid</u>, and <u>PagerDuty</u> to proactively detect and alert customers and engineers about overnight job failures, ensuring swift issue resolution.
- On-call support on a rotating basis.

Pulsepoint - Data Engineer and Director of Infrastructure for Data

New York City, NY & Newark, NJ (Telecommute) - Mar 2015 - Nov 2023

Michael J. Pedersen: (908) 283-0318: datacyclist@gmail.com: My Site: LinkedIn

Director of Infrastructure for Data, May 2018 - Nov 2023

- Architected data streaming that manages 40T of data/day.
- Lead maintainer for ETL pipelines, encompassing over 250 transformations.
- Established new data centers in Europe and in Virginia.
- Migrated data center, moving processing of data pipelines to new data center.
- Split data management team into data platform and data product development.
- Guided the team through splitting our ETL pipelines into multiple repositories.
- Organized the migration of ETL pipelines from Python 2 to Python 3.
- Insituted and formalized processes and procedures for the team.
- Planned capacity to ensure we could handle incoming data throughout the year.
- Replaced Vertica with Trino.
- Reported on system wide data latency using <u>ElasticSearch</u>, <u>Kibana</u>, and <u>Grafana</u>.
- Conducted interviews for my team and for teams that work closely with my team.
- Automated distribution of incident reports to all affected parties.
- Changed hardware profiles for <u>Hadoop</u> to remove storage and compute colocation.
- Onboarded new team members, helping them to fully integrate into the team.
- Held weekly 1 on 1 meetings with team members.
- Developed new stories (including estimates) for our <u>Jira</u> board.
- Prioritized tickets for our Jira board.
- Passed annual HIPAA training for data protection.
- Developed roadmap for the Data Platform team.

Data Engineer, Mar 2015 - May 2018

- Collaborated with other teams to help them use the systems to find the data they need.
- Worked with other teams to define and then implement needed features for our internal ETL pipeline framework.
- Participated in on-call rotation.

Weight Watchers - Systems Engineering Lead

New York City, NY - Nov 2014 - Feb 2015

- Developed lightweight monitoring tool for use within my group.
- Configured Vormetric products to ensure HIPAA compliance for customer data.
- Worked to transfer from <u>Rackspace Cloud</u> to <u>Openstack</u> based private cloud.

OrcaTec, LLC - Developer

Atlanta, GA (Telecommute) - Jun 2012 - Oct 2014

- Mentored other developers in the use of <u>TurboGears</u>, <u>SQLAlchemy</u>, <u>Python</u>, and <u>JavaScript</u>.
- Organized weekly meetings for members of the frontend (OTGUI) team, providing a chance to discuss (in depth) the issues the team was facing.

Choopa.com - Developer

Sayreville, NJ - Jan 2012 - May 2012

- Developed library to manage OpenStack nodes, and gather billing information.
- Built Nagios configuration file generator for in-house web interface for Nagios.
- Configured <u>Bacula</u> backup system as replacement for custom backup scripts.
- Reconfigured Nagios monitoring, reducing full check from 8 hours to 2 minutes.

Michael J. Pedersen: (908) 283-0318: datacyclist@gmail.com: My Site: LinkedIn

- Refactored in-house <u>Nagios</u> web interface. This reduced the workload from six files down to one when adding new checks.
- Several smaller bug fixes and features throughout the internal code base.

Education

Bachelor of Science in Computer Science, 2000 East Stroudsburg University, East Stroudsburg, Pennsylvania

Professional Certificates

<u>Google Cloud Certified Professional Data Engineer</u> (Jan 2024) Online Course - Google