Michael Penhallegon

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Summary:

A data-focused backend software engineer with a focus in API development, building data pipelines, and ETL (extract, transform, and load) processes. Has a diverse set of skills from application development to data analytics. Has utilized mixtures of skill-sets to develop projects improving the data utilization and access of data to answer research and business questions. Love new challenges and investigating applications of software and data engineering in new contexts.

- 4+ years of experience with Python and advanced knowledge of R, Rust and SQL in production development environments

- Skilled in understanding and designing ETL pipelines to wrangle and process fragmented data; High competency building and maintaining microservices that are instrumented/generate rich metrics, logging and tracing.

- Collaborative leadership connecting business stakeholders with data solutions

- DevOps skill-sets utilizing container images, S3, Apache Airflow, Postgresql, Kubernetes, and Docker

Experience:

DomainTools   **Seattle, WA**
Software Engineer II   July 2021-August 2022

- Developed, troubleshooted and maintained multiple Python-based FastAPI RESTful microservices

- Used unit and integration testing patterns to maintain quality engineered code bases

- Integrated and configured Prometheus monitoring, alerting and Grafana dashboards

- Troubleshooted bugs and data quality issues from front-end down into back-end and data storage systems

- Wrote and developed complex PostgreSQL function and stored procedure against large datasets to transform data and maintain good data warehousing metadata

- Developed integrated data reporting from multiple microservices and databases to provide operational usage statistics and analytics to management and stakeholders across a hybrid on-prem/cloud environment

- Used agile and scrum development practices to triage and collaborate within a team and across teams

Bristol Myers Squibb   **Seattle, WA**
Data Engineer   August 2018-June 2021

- Collaborated and developed software and data solutions, focussing on backend data engineering

- Streamlined data ingestion and delivery, reduced time for data transfers utilizing automation, and optimized data delivery from days to hours.

- Led and contributed to the collection of requirements and creation of project plans with multiple partners and collaborators to build data, software, and visualization tools.

- Developed visualizations, web applications, and RESTful APIs; using R/Python

- Developed and maintained multiple data pipelines utilizing Airflow and containers (with Docker or Amazon ECS) to load, transform, and ingest batches of data into OLAP databases (primarily Postgres and Redshift).

- Developed over five different internal packages and libraries for team members to utilize upstream data and RESTful APIs in consistent and re-usable ways

Fred Hutchinson Cancer Research Center   Seattle, WA
Research Intern   June 2017-June 2018

- Placed in the HIV Vaccine Trial Network Core Lab; Inclusive of two internship terms (Summer 2017 & Spring 2018) with complimentary work between terms.

- Completed thorough literature review and prepared results for publication in an academic journal.

- Contributed to a qualitative research project investigating HIV/AIDS stigma among HIV+ and HIV- men

- Developed and published an R package, to linearly interpolate Census-data to generate heath metric values.

The Evergreen State College   Olympia, WA
Math Tutor   September 2017-June 2018

- Tutored in a college math center in the subjects of pre-algebra, algebra, calculus, and computer science

- Covered advanced topics including differential calculus, discrete mathematics, programming, and digital logic

- Used equity-minded pedagogy to tutor and engage students in using quantitative skill sets

The Evergreen State College   Olympia, WA
Outreach and Retention Advisor   June 2016-June 2018

- Advised and mentored first-generation/low-income students in navigating college and achieving success through a federal grant sponsored Trio program.

- Used equity-minded framework to empower students throughout their academic journey's

- Lead program development to improve academic skills, and assist students in life and career goal planning

- Contributed and assisted to hiring of Provost position by development of job descriptions, running candidate student forums and recruitment of students to college committees

Education:

The Evergreen State College   **September 2015-June 2018**

Bachelor of Arts, emphasis in Computer Science and Public Health Studies

Volunteer Experience:

Sisters of Perpetual Indulgence, Abbey of St Joan, Secretary, September 2019-Present

2021 King-Snohomish-Island Counties Ryan White RFP Review Committee, Member, March 2021

2019 King-Snohomish-Island Counties Ryan White RFP Review Committee, Member, December 2018

The Evergreen State College Provost Search Committee, Member, September 2016-January 2017

Professional Memberships & Affiliations:

Association of Computing Machinery, Professional Member, December 2021-Present