

MATTHEW GALVIN

SOFTWARE ENGINEER

OVERVIEW

Software engineer with over five years of experience in bioinformatics pipelining, genomics data analysis, and full-stack web development.

EXPERIENCE

Bioinformatics Scientist

Nov 2020 to Present

Providence Health & Services

- Oncogenic variant detection and bioinformatics pipeline development.
- Python machine learning and sequencing data analysis.
- Cloud storage, computation, and piplining.

GCP, AWS, Docker, Python, R, Shell Scripting, Cromwell, Nextflow, IGV

Genomics Software Engineer

May 2019 to Nov 2020

Providence Health & Services

- Google pipeline development and clinical report generation.
- Developed a Rails webapp to present somatic sequencing variants.
- Mentored new engineers in software best practices.

GCP, Docker, Ruby/Rails, Javascript/React, Python, Postgres, MongoDB

Engineer, Life Cycle Management

Nov 2017 to Apr 2018

Illumina, Inc.

- Python manufacturing automation solutions.
- Debugged instrumentation software in a production environment.
- Established SW deployment strategies with manufacturing partners.

Manufacturing, Project Management, Python, Shell Scripting

Software Test Engineer

Sep 2014 to Nov 2017

Illumina, Inc.

- Software test lead for the NextSeqDx, MiSeq, and MiniSeq sequencers.
- Managed a team of test engineers to execute verification protocols.
- Python automation and functional testing for sequencer UI workflows.

Software Test, Product Management, C#, Python, JIRA, JAMA, SAP

Optical Engineering Intern

Jun 2014 to Sep 2014

Illumina, Inc.

- NeoPrep System LED detector testing.
- Wrote Python scripts to analyze electrowetting droplet manipulation.
- Conducted LED efficiency and signal optimization experiments.

Process Verification, Test, Python

EDUCATION

B.S. Chemical Engineering
Oregon State University, 2014

LANGUAGES

Experienced in **Python**, **R**, **Ruby**, **JavaScript**, and **Shell Scripting**.
Learning C++ and Golang.

SKILLS

- Software Engineering
- Pipeline Development
- Machine Learning
- Docker & Containerization
- Amazon Web Services (AWS)
- Google Cloud Platform (GCP)
- Web Development
- Material-UI & Bootstrap
- React & jQuery
- Flask & Ruby on Rails & Express
- Data Visualization
- D3 & ggplot & matplotlib
- Database Design
- BigQuery & Postgres & MongoDB
- Process Automation
- Software Verification & Validation
- Agile & Scrum
- Github & Bitbucket & GitLab
- Project & Product Management
- MacOS & Linux & Windows
- Adobe Creative Suite
- CITI Certification
- \LaTeX

CONTACT

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