Jonathan Goldfarb

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637 NE Mason Rd.   •   Bend, OR 97701

Experience

Dental EMR   **Bend**, OR (Remote)

Engineering Manager   *October 2020–January 2021*

– Design and develop features across a legacy RESTful Python (Django) backend and a JavaScript (AngularJS) application.
– Communicate across technical and non-technical team members and stakeholders to develop requirements for product iterations and risk mitigation strategies.

NoetherRudin DBA Dolr   **Columbus**, OH (Remote)

Technical Consultant   *September 2019–December 2020*

– Design, develop, and implement highly scalable application backend: Python, Node.js/JavaScript, and SQL technology stack deployed to AWS Lambda. Integrate data sources and external vendor systems (Dwolla, Plaid, Auth0). Develop data-intensive JavaScript (Svelte) front-end applications.
– Architect containerized CI/CD pipelines using Docker and Gitlab. Integrate cloud solution for deployment of application to production on AWS RDS, and EC2 using Terraform and custom delivery tooling.
– Provide technical review and input on architecture & product roadmaps. Work with development team members to create subtasks and schedules based on available resources.

Florida Institute of Technology   **Melbourne**, FL

Assistant Professor and Director of Mathematics Advancement Center   *August 2016–*

– Technical lead, large-scale, high performance codes for optimal control in quantum mechanics and biomedical engineering applications with Python and MATLAB interfaces.
– Maintainer, open-source computational toolbox for staff scheduling in COIN/OR and ETL workflows for internal reporting pipeline.
– Developer, instructional material on data-driven analysis and computational approaches to problems in applied and physical sciences, statistical methods, machine learning, and simulation.

Harris Corporation   **Melbourne**, FL

Software Engineer   *May 2016–December 2016*

– Develop expertise in distributed and parallel algorithms for large-scale data processing (Scala, Apache Spark, Hadoop and HDFS, and C++). Document opportunities and technical
– Support reproducibility and collaboration using continuous integration and source code control by configuring and managing a Gitlab instance in a virtual machine along with a HPC cluster for development, staging, and testing of deployed code.
– Participate in Agile/Scrum ceremonies, manage backlog and collaborate using Jira.

Florida Institute of Technology   **Melbourne**, FL

Graduate Student Assistant   *August 2009–May 2012, August 2015–May 2016*

- Administer and develop Sage (multi-language/Python) and WebWork (Perl) server applications for use in educational and research capacities.
- Developed MATLAB, R, and Julia models for applications in statistics and physics and delivered training on computational tools.
- Instructional experience in partial differential equations, applied statistical analysis, and mathematical modeling
- Project owner, custom application management web service and administrative tools implemented in PHP, SQL, with a data processing and reporting front-end written in Python and a web-based GUI written in Javascript, for NSF-supported Research Experience for Undergraduates (REU).

Education

Florida Institute of Technology   **Melbourne**, **FL**
PhD, Applied Mathematics   *Spring 2016*
Dissertation Topic: *On the Optimal Control of Free Boundary Problems for Second Order Parabolic Equations*

Florida Institute of Technology
BS, Environmental Sciences   *2009*

Skills

Languages: C, C++, Java, JavaScript, Julia, LaTeX, Perl, Python, SQL, Scala

Platforms & Tools:
- Linux, Windows, AWS, Google Cloud Platform, Heroku
- Apache Hadoop Ecosystem (HDFS, Parquet, Spark)
- Git
- MongoDB, RDBMS (MySQL, PostgreSQL)
- Machine Learning Frameworks (Tensorflow, Keras)
- Docker and Docker Compose, Ansible