Jake Pifer

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Previous Work:

- Q2 Solutions   Nov/2019-Present
  - Software Engineer   Morrisville, NC
  - Primary API developer and secondary database develop on a large team whose project is to be used globally(see below for project details). Started at the ground level of the project and have designed and built up the API layer from nothing to MVP, so far. Collaborate with client side developers and other teams regularly as my team's project controls the flow of all DNA/RNA sequencing data company wide.
- TOURtech   Dec/2018-Aug/2019
  - Full Stack Developer   Raleigh, NC
  - Primary software developer on a team of three. Built main web application from ground to release one. Worked on all aspects of each project from the database to the middleware/api to the client ui.

Education:

BACHELOR OF SCIENCE | 7/2018 | UNIVERSITY OF NORTH CAROLINA AT WILMINGTON

- Major: Computer Science
- Concentration: Systems

    -Concentrating on different systems(ex. Operating Systems, Languages, Networking…)

- Cluster: Modeling

    -Creating, using, and advancing algorithms

Languages:

- Python: Advanced, OracleSQL: Advanced, Javascript: Advanced, Java: Intermediate, Node: Intermediate

Databases:

- Oracle: Advanced, SQLAlchemy(toolkit): Advanced, PostgreSQL: Advanced, MongoDB: Intermediate

Frameworks/Libraries:

- Qiskit: Beginner, Flask: Advanced, Openapi/Swagger: Advanced, Connexion: Intermediate, Angular: Intermediate, React/Redux: Intermediate

CI/CD:

- AWS: Intermediate, Gitlab: Intermediate, Azure DevOps: Intermediate, Kubernetes: Intermediate, Docker: Intermediate, Proxmox/Homebrew: Intermediate

Projects: (All personal projects can be found on GitHub)

- Analysis Delivery Management System(ADMS)(Work Q2 Solutions)
  - This is the work project I have been on while working at Q2 Solutions that is to be deployed worldwide to replace a legacy system. ADMS is a REST application as well as a few other subservices. The main purpose of ADMS is to control the flow of data that is produced by the companies DNA/RNA sequencers to other analysis applications as well as persist said data to our database and track/display data and pipelines on a Angular UI. My focus on this project has been on the backend working with the API(Python/Flask/Openapi) and database(Oracle) as well as invocation of Nextflow pipelines with Kafka. I was the main developer of the API building it from scratch up to MVP level, so far, as well as the secondary database developer.
- TOURtech Event Cordination Service(Work)(TOURtech)

- This is a Python/Flask/Angular/PostgreSQL web application created to track work done by our site crew as well as monitor network devices deployed by the crew. I worked as a Full Stack developer for this project and was the main builder of the entire application, being one of two developers to build this. I built this from the ground up to release one.
- Qiskit Quantum Computing Test Application(In Progress)(Personal)
  - Python cli application that I have been creating to build and run circuits using IBMQ and Qiskit. This project was fueled by my interest in learning quantum mechanics. This application runs circuits that I pre-built on the quantum system with the shortest queue and correct amount of qubits or on a simulator, and then log and graph results with matplotlib.
- VST Audio Distortion Plug-In(Completed)(Personal)
  - C++ application written using JUCE Framework
  - This uses the Fast Fourier Transform to take an audio signal and distort different frequencies. This is commonly used in mastering music, movie/television audio, and anything that requires the use of making a sound more distorted.