Luke J. Pereira

Software Engineer

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Employment

Amazon *March 2021 to present*

Software Engineer

BenchSci *July 2017 - December 2019*

Full Stack Software Engineer https://www.benchsci.com

- Developed a React web app along with Python and Node APIs for a reagent search engine used by thousands of scientists at the top 20 pharmaceutical companies in the world
- Developed SOC2 compliant integrations and performed acceptance testing with enterprise clients; including SAML SSO, Ariba procurement checkouts, and multi-factor authentication
- Rewrote the core ElasticSearch API, increasing performance by upwards of 10x, improving test coverage and code maintainability. Integrated API with ML and bioinformatics big data pipeline
- Developed ecommerce APIs, payment flow UIs, and drop-shipping automation tools via SMTP

Contract and Freelance *January 2012 to present*

- Developed C++ software for secure and robust radio frequency communication between two Arduino microprocessors. Currently used to detect malfunctions in hydraulic lifts: https://git.io/Jkmnw

Education

Honours Bachelor of Science *September 2015 - April 2020*

Computer Science and Mathematics Double Major Final Year GPA: 3.75

University of Toronto

Art Fundamentals Certificate *January 2012 - August 2013*

York University Fine Arts and Animation

Projects

CloudFund https://github.com/lukepereira/cloudfund

A React app with a Flask API used for crowdfunding and maintaining cloud resources and deployments. Using Stripe to process funds, Kubernetes to manage clusters and deployments, and the GitHub API for deployment and configuration versioning.

TF Classify https://ply.gl/org.tensorflow.app

An Android app that uses Googles Inception model to classify camera frames in real-time. Built from open-source code, it has accumulated over 12,000 installs in the Google Play Store.

Skills

Languages and Frameworks

Python, Golang, Node, C/C++, LISP
ES6 JS, React, Redux, Sagas, Selectors
REST, Flask, gRPC, GraphQL
TensorFlow, Pytorch, scikit-learn, numpy

Database Technologies

SQL/RDBMS, ElasticSearch, Neo4J. MongoDB

Cloud & Infrastructure

AWS, GCP, Docker, Kubernetes, Serverless
Terraform, Ansible, Envoy, OpenCensus

Notable Courses and Knowledge LaTeX: https://git.io/JfwkR

- Advanced Data Structures & Algorithms, Neural Networks & Machine Learning, SCRUM & other SDLC, Information Security, Distributed Systems, DevOps, Git, Unix, Performance Analysis, Stochastic Networks & Queuing Theory, Databases, OS & Computer Organization
- Statistics & Probability Theory, Differential Geometry, Combinatorics, Number Theory, Advanced Graph Theory, Multivariable Calculus, Partial Differential Equations, Dynamical Systems, Linear Algebra, Abstract Algebra, Topology, Group Theory