

# Laura Dang

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## SKILLS

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**Languages:** Python • C++ • Bash • SQL • HTML • CSS

**Frameworks:** Flask • PyTorch • TensorFlow Keras • Kubeflow • MLflow

**Technologies:** Docker • Kubernetes • Helm • MySQL • MongoDB • Dash • Linux • Jenkins • Grafana • Jira • Git

**Cloud Services:** Azure (AKS, AAD, Blob Storage, ML) • AWS (EKS, EC2, ES, S3) • IBM Cloud (IKS)

## WORK EXPERIENCE

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**Nuro** – Software Engineer (Site Reliability Engineering) Mountain View, CA | May. 2022 – Aug. 2022

- Expanding and supporting production vehicle data center/cloud infrastructure, storage, and networking systems

**NVIDIA** – Machine Learning Software Platform Architect Santa Clara, CA | Jan. 2022 – Apr. 2022

- Developing NVIDIA's 1<sup>st</sup> generation Machine Learning as a Service (MLaaS) Platform

**IBM** – Machine Learning Infrastructure Engineer Calgary, AB | May 2021 – Aug. 2021

- Built scalable end-to-end **K8s** system to automate ML workflows & optimize ML investments for enterprise clients
- Used **scikit-learn**, **Kubeflow**, & **MLflow** to create pipeline with parallelized preprocessing & model training stages
- Developed CI/CD system to automate model deployment on **ACI** & **AKS** using **Azure ML**, **Seldon Core**, **GoCD**, & **Jinja**
- Created ML monitoring system to track feedback, outliers, & request rate/latency using **Prometheus** & **Grafana**

**Molex** – Software Developer (DevOps & Machine Learning) Waterloo, ON | Sept. 2020 – Dec. 2020

- Revamped **Python** pipelines to stream team stats to **InfluxDB**, **MySQL**, & **Grafana**, improving test coverage by **27%**
- Integrated **DeepSORT** tracking algorithm into **Tensorflow** 3D object detector to safeguard industrial danger zones
- Led creation of centralized **Jenkins** logging system by deploying **AWS Elasticsearch/Kibana** & **Splunk** with VPCs

**Soapbox Innovations** – Machine Learning Engineer Toronto, ON | Jan. 2020 – Apr. 2020

- Developed REST API using **Flask**, **MySQL**, **Docker**, & **Gunicorn** to provide ML web services for 100 000+ users
- Built **cron**-scheduled ETL pipeline to dynamically retrain **fast.ai** models on unique client data & upload to **AWS S3**

**GrantMatch** – Junior Software Developer Oakville, ON | May 2019 – July 2020

## PROJECTS

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**Automatic Black & White Image Colorizer**  Apr. 2020

- Built & trained **PyTorch** encoder-decoder **convolutional neural network** to colorize grayscale images

**BehaviourStack** – RyersonHacks Winner (Track Challenge)  Sept. 2019

- Created tool that collects demographics of advertisement's audience using **ResNet** model & **OpenCV** in real-time

## EDUCATION

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**University of Waterloo** Sept. 2018 – Apr. 2023

Candidate for **Bachelor of Mathematics**, Double Major in **Statistics & Computational Math**, Minor in **Computing**

- **Honours:** Dean's Honors List (Spring 2020)