Marie-Claude Guertin

Pilote de système

Courriel **mc.guertin@gmail.com**
Cellulaire **(581) 985-8478**
Site Web **mcguertin.github.io**

SOMMAIRE

My strong suits are Python development and machine (deep) learning in both industry and academia. Over the next few years, I intend to develop as a generalist software engineer. For that, I have learned a bit more of modern C++, frontend technologies, data engineering, DevOps, software architecture, and even product management as well.

EXPÉRIENCES

Pilote de système / Jul 2020 - Aug 2021

Worked a few short stints at different organizations, including at my own non-profit startup. Focused on AI, DevOps, MLOps, and a bit of Agile Project Management.

`Jenkins` `Terraform` `AWS` `GCP` `DVC + CML` `GatsbyJs` `ClickUp`

ML Engineer / Mar 2019 - May 2020

Smart Cart Co - Delaware, US

Researched novel approaches for large scale, yet fine grained visual classification. Enhanced code readability and performance by redesigning and implementing it in modules.

`Python` `C++` `GStreamer` `DeepStream` `CNN`

Python Developer / Mar 2018 - Feb 2019

The LHC - Geneva, CH

Worked on backend development in Python and on machine learning methods for textual data - from research to production.

`Python` `Flask` `PyTest` `FastAI` `PyTorch` `scikit-learn` `CNN` `LSTM`

Summer Student / Jun 2017 - Sep 2017

The LHC - Geneva, CH

Configured and simulated runs of different detector-particle beam interactions. Added a more robust track reconstruction algorithm (General Broken Lines) to the Proteus framework

COMPÉTENCES

Languages: Python, C++, C, JavaScript, HTML, CSS, Bash
Tools: PyTorch, OpenCV, NumPy, Pandas, Flask, PyTest, MQTT, Docker, Jenkins, Terraform
Other: CI/CD, Version Control, Web, Data science and ML, Cloud computing

OTHER PROJECTS

- **Market research** and **literature review** of trends in digital mental healthcare.
- Design of a **pilot study** to study a semi-novel intervention in mental healthcare.
- Facilitation of agile implementation in teams - **SCRUM, Kanban**
- Fish detection and classification - **Probabilistic Modeling, CNN**.
- People counting in dense crowd images using sparse head detections - **CNN, SVM**.
- Vehicle detection, classification, and tracking - **CNN, openCV**.
- Simultaneous Localization and Mapping (SLAM) on a robotic wheelchair - **ROS**

ÉDUCATION

Robotics and AI - 4.00/4.00 - 2018

Master, The University - Islamabad, PK
Thesis m2caiSeg: Semantic Segmentation of Laparoscopic Images using Convolutional Neural Networks

Mechanical Engineering - 3.58/4.00 - 2014

Bachelor, The University - Islamabad, PK
Thesis Design of an instrument for cam profile measurement

AWARDS

- My startup was awarded a top 5 position at the the 2020 Social Startup competition.
- Full scholarship and Gold Medal in Master studies.
- Selected as a volunteer at that amazing conference in 2018 held in Harrapa.

ACTIVITÉS / INTÉRÊTS

Marche en forêt, vélo, cuisine, jardinage.