Udbhav **Prasad**

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Skills

Languages	Python, SQL, Java, C++, Scala, HTML, CSS, MATLAB, R, Prolog, LaTeX
Big Data Frameworks	Spark, Splunk, Kafka, Hadoop, NiFi
Development Tools	Azure, Docker, Linux, Git, CMake, JMeter — PyCharm, Clion, VSCode, Vim
Python Packages	PyTorch, PySpark, Scikit-learn, NumPy, Pandas, Flask, Matplotlib, Seaborn
Soft Skills	Communication, Self-directed, Teamwork, Problem-Solving, Adaptability, Time Management

Experience

Royal Bank of Canada   *Jan. 2022 - Ongoing*

CYBER SECURITY ANALYST

- Analyzed large amounts of data to produce reports to discover suspicious activity with Splunk
- Updated intelligence knowledge base and threat profiles from discovered threats

Ryerson University (St Michael's Hospital)   *Jan. 2022 - Ongoing*

RESEARCH ASSISTANT

- Perform Biomedical Image data analysis to create effective image unmixing algorithms in MATLAB

Ontario Ministry of Health   *Sep. 2020 - Aug. 2021*

APPLICATION PROGRAMMER

- Independently created two POC distributed log streaming apps on local cluster & Azure Cloud Platform:
    1. Using Azure Event Hubs, Functions and SQL
    2. Using Spark Streaming from Kafka, NiFi and HDFS
  Work included: Writing producers for tailing log files, multiple consumers, email alerts, parsing, etc.
- Created 6-node cluster with installed software in cluster mode(Spark, Kafka, NiFi) for use of developers & POC applications
- Created Python GUI app with openpyxl & tkinter to automate Excel reports' formatting for AODA, saving manual formatting of 100+ files

Projects

Transformer Implementations Package: [GitHub](#)   *Nov. 2020 - Ongoing*

PYTHON | PYTORCH | DEEP LEARNING | NATURAL LANGUAGE PROCESSING | COMPUTER VISION | GIT

- Python Library for Transformer neural networks models used for machine learning tasks (Implemented/Trained from scratch)
- Used in Image Classification and Sequence-to-Sequence translation; Published package on **PyPi**
- Models: Vision Transformer(ViT), Data efficient image Transformers(DeiT), GPT, BERT, Vanilla

Image Generation with GANs & Auto-encoders: [GitHub](#)   *Jan. 2021 - Ongoing*

PYTHON | PYTORCH | GENERATIVE MODELING | DEEP LEARNING | COMPUTER VISION | GIT

- Python Library for Generative Adversarial Networks used for Computer Vision tasks (Implemented/Trained from scratch)
- Models trained and optimized producing realistic images; Published package on **PyPi**
- Models Implemented: StyleGAN, Pix2PixHD, SRGAN, DCGAN, WGAN, SNGAN, Variational Autoencoder, etc.

Neural Style Transfer Web App: [GitHub](#)   *May. 2021*

FLASK | DOCKER | PYTHON | PYTORCH | COMPUTER VISION | GIT

- Flask Web App containerized with Docker to combine the style from an image to another
- Through Web Interface you can customize training process and run transfer in back-end

Education

Ryerson University   *Sep. 2018 - April. 2023*

BACHELOR OF SCIENCE IN COMPUTER SCIENCE, GPA: 3.82 - DEAN'S LIST '19 - '20

- Currently 4th Year Computer Science Student, Minor in Mathematics
- **Relevant CS Coursework**: Machine Learning •Computer Vision •Data Structures •Databases •Functional and OOP
- **Relevant Math Coursework**: Probability and Statistics •Linear Algebra •Calculus and Computational Methods •Discrete Math