# Bikash Jaiswal

+1 514-638-2519 | bjjaiswal123@gmail.com | linkedin.com/in/bikashjaiswal/ | bikash-jaiswal.github.io

## Summary


- Software Engineer with experience in designing, implementing, and delivering data-driven applications using best practices..
- Strong grasp of programming and algorithmic concepts, with a passion for leveraging machine learning and Big Data technologies to improve services
- Skilled in Python, Git, PyCharm, IntelliJ, gRPC, Jira, Jenkins, Confluence, Pandas, NumPy, Matplotlib, Scikit-learn, and Agile methodologies.
- Proven track record of building scalable AI solutions and automating data pipelines, resulting in a significant reduction of manual effort and improved performance.
- Strong communicator and team player, able to work with cross-functional teams to prioritize technical requirements and solve complex problems.
- Continuously looking for new challenges in cutting edge technologies like Software Development, Distributed Systems, Cloud, Data Infrastructure, AI/ML, High Scale Data processing and Analytics are few that excites me the most.


## Technical Skills

**Languages**: Python, JavaScript, Rust, C++
**Frameworks**: React, Nextjs, flask
**Developer Tools**: Git, PyCharm, IntelliJ, Docker, gRPC, Jira, Jenkins, Confluence
**Data Science Libraries**: Pandas, NumPy, Matplotlib, Scikit-learn, TensorFlow, Keras, PyTorch
**Concepts**: Machine Learning, Algorithm Design, OOP, Functional Programming, Agile, Web & RestFul Services
**OS**: Linux/Unix, Windows

## Experience

**Software Developer (R&D)** Oct 2021 – Present
*Cerence Inc* *Montreal, Canada*

- Proactive communicator–specifically, working with data scientists who develop the models for building NLP models, and external API provider to continuously prioritise and re-prioritise technical requirements
- Building Conversational AI products that are used in Cerence sonic domains.
- Share the ownership of two major scalable NLP solutions (Astrology & Sports Domains)
- Developed multiple functional requirements in Sports Domain, moving it from 30% accuracy to 75% accuracy in production environments
- Refactor existing software components to improve their performance, scalability and maintainability.
- Develops new user-facing dialogs, enhances existing dialogs, and maintains legacy dialogs

**Research Assistant** Aug 2017 – Sep 2019
*Machine Leaning & Big Data Analytics Project, R&D Centre,Tezpur University* *Assam, India*

- Involved in Analytics Engineering to measure, optimize and build advanced techniques and analytics platforms to extract insights from biological Big Data.
- Automated ETL pipelines which reduced manual effort of data wrangling by 80% and improved time performance by more than 60%.
- Build RESTful api with Flask frameworks for extraction of biologically relevant network modules and performed test automation for deployment of machine learning models (Random Forest, XGBoost) in the university's HPC
- Developed algorithms that work in parallel to perform genes network extraction on Nvidia's GPU, that performs 120x better than serial CPU run time
- Identified 6 biomarker (genes) having 80% potential of causing breast cancer in homo-sapiens
- Published my observations in a paper titled PNME – A gene-gene parallel network module extraction method
- Technology Used: Python, C++, CUDA, Scikit-learn, HTML, CSS, JS

## Projects

**Covid-19 Face Mask Detector** | *Python, PyTorch, Scikit-learn, Numpy, Matplotlib*

- Removed gender bias in a custom trained CNN model for a image classification problem and improved F1 score from 86% to 89% to correctly classify a person wearing a mask or not a mask and not a human image.

**Movie Success Forecaster** | *Numpy, Scikit-learn, Pandas, Matplotlib*

- Modified the regression problem of predicting Movies Revenue to Multi-class classification problem to predict movies success class (Hit, SuperHit, Flop, SuperFlop).
- Performed feature engineering for dimensionality reduction, with increase in the performance of prediction when trained with Neural Network, and Ensemble Learning models.

**SmartProp: Blockchain-based Decentralised Asset Management Application** | *ReactJS, CSS, HTML, Solidity*

- Investigated the use of Blockchain technology outside the crypto-currency realm to build Dapps (an application built on a decentralized network that combines a smart contract and a frontend user interface).
- In an attempt to learn the key to expanding Blockchain's user base and encounter the limitation of storage problem of Blockchain (only 1 Mb), performed integration of the Dapps in IPFS (A peer-to-peer hypermedia protocol designed to make the web faster, safer, and more open) is used.

## Education

**Concordia University** — Montreal, Canada
*Master of Applied Computer Science* — *Sep. 2019 – June 2021*

**Tezpur University** — Assam, India
*Bachelor of Computer Science and Engineering* — *Aug. 2013 – May 2017*