

Rahulpreet Singh Bal  
Edmonton, AB  
(825) 461-3888  
[rahulpre@ualberta.ca](mailto:rahulpre@ualberta.ca)  
[LinkedIn](#)  
[GitHub](#)  
[Portfolio Website](#)

## **Professional Summary**

Motivated university student with 3+ years' experience in programming and solving problems. Strong conceptual and technical knowledge of machine learning techniques and frameworks demonstrated through personal projects. A creative thinker, possessing a drive to use my knowledge and skills to real world problems and provide meaningful solutions and turn ideas into reality. A team player committed to delivering results in a respectful, inclusive, and service-minded manner.

## **Skills**

- **Programming:** Python, Java, JavaScript, HTML5, CSS3, SQL, Tableau
- **Frameworks/Libraries/Tools:** Tensorflow, Keras, Scikit-learn, Numpy, Pandas, Matplotlib, Seaborn, React.js, JQuery, Node.js, Github
- **Version Control:** Git
- **Soft Skills:** Strong organizational skills and demonstrated ability to work under pressure and adhere to tight deadlines, Strong attention to detail, Ability to handle multiple competing priorities, Ability to work in a fast-paced environment, Excellent oral and written communication skills, Strong analytical skills, Agile Methodology
- **Other:** Expertise in Microsoft Azure, Aveva WebAPI and ESRI ArcGIS enterprise, MS Office 10 (Excel, Outlook, PowerPoint, and Word),
- **Languages:** English, Punjabi, Hindi

## **Work Experience**

### **Telematics Analyst Co-op**

North American Construction Group

Sep 2023 - Present

- Currently working with Azure DevOps to deploy CI/CD pipelines for automating data transfer between Aveva Pi Web API and esri ArcGIS enterprise via websockets using async functions and multiprocessing.
- Developed new dashboard, feature layers and helped troubleshoot server failures in ESRI ArcGIS
- Automated downloading files from an SFTP server to Azure Storage( shared as network drive)
- Made meaning dashboards in Power BI to visualize meaning interpretation of millions of data points.

## **Education**

### **Bachelor of Science**

University of Alberta

Expected Graduation: June 2025

Current GPA: 3.5/4.0 – Dean's Honor Roll[2022-2023]

Relevant Courses:

- CMPUT 261 - Introduction to AI, CMPUT 267 - Basics of Machine Learning
- CMPUT 291 - File and Database Management, CMPUT 301 - Introduction to Software Engineering
- CMPUT 365 - Introduction to Reinforcement Learning, CMPUT 328 - Visual Recognition
- CMPUT 366 - Search and Planning in AI

## **Certifications**

- Data Visualization Virtual Experience Program - TATA [[Credential](#)]
  - Framing the Business Scenario, Choosing the Right Visuals, Creating Effective Visuals, Communicating Insights and Analysis
- Data Analysis and Technical Consulting Virtual Experience Program – SAP [[Credential](#)]
  - Assembled Data, Created a dashboard of visualization on SAP Cloud Analytics software, presented in depth data analysis of a company having troubles with fraudulent products.
- Data Analysis with Python – FreeCodeCamp [[Credential](#)]
- Data Science and Machine Learning Bootcamp – Udemy [[Credential](#)]
- Pandas – Kaggle [[Credential](#)], Data Visualization - Kaggle [[Credential](#)]

## **Projects**

1. **Student performance prediction** [[Source](#)]
  - Created a data science project which predicts a student's performance on a Math test given certain inputs.
  - Used modular coding for structure and made use of logging and CustomExceptions.
  - Did EDI using jupyter notebooks, data ingestion, transformation , model training and hyperparameter tuning using Numpy, pandas sklearn and OpenGridCV
  - Matplotlib and seaborn for visualization and HTML/CSS/Javascript for front-end
  - Python flask for http server and deployed on AWS using CI/CD pipeline.
2. **Tableau Project HR Analytics** [[Source](#)]
  - Did data exploration, cleaning and analysis to create a dynamic tableau dashboard.
  - Created custom charts like donut charts and a composite bar and circle chart as well as custom fields and parameters.
  - Would allow the company to clearly identify subtle factors leading to high attrition rates and improve employee retention and engagement.
3. **Sports Celebrity classification** [[Source](#)]
  - Created a data science Classification project which when given an image tells us which sports celebrity it is.
  - Used Python, Numpy, Pandas and OpenCv for data-cleaning.
  - Matplotlib and seaborn for visualization / Sklearn, tensorflow and CNN for model.
  - Python flask for http server / html—css—javascript for user interface.

## **Volunteer Experience**

**International Student's Association**, University of Alberta

- Active member of the group where every year we hold various events to promote our diverse culture and make sure every International student feels like home.