# Siraaj Singh Monga

**3rd Year, Statistics**

+1-778-723-9664 | siraajsmonga@gmail.com | linkedin.com/in/smonga001 | github.com/siraajsmonga

## TECHNICAL SKILLS

**Languages**: Python, R, SQL, MATLAB, CSS
**Libraries**: NumPy, Pandas, Matplotlib, scikit-learn, seaborn, tidyverse, ggplot2
**Tools**: Git, VS Code, IntelliJ, Jupyter Notebook, Power BI, Tableau, R Studio, MySQL, MS Office Suite
**Awards**: **Winner nwplus Hackcamp** for Best Future Startup

## PROJECTS

**Skillful** ⧉ | **Winner nwplus Hackcamp, Best Future Startup** | *ExpressJS, MongoDB, OpenAI*     Nov 2024 - Nov 2024
- Developed **Skillful**, a community-driven skill-bartering app with dynamic front-end interactions using **JavaScript.**
- Built RESTful API endpoints using **Node.js** and **Express.js** to manage user profiles, skill matching, and messaging.
- Built a secure matching system using **Auth0** and **MongoDB** for scalable user data and skill trade history.

**University Ranking Analysis** ⧉ | *R, Python, ggplot2, dplyr*     Sep 2024 - Dec 2024
- Designed **linear regression models** to assess global university ranking factors on key metrics including international student proportions, faculty-student ratios, and gender balance.
- Conducted **model diagnostics, variable transformations, and model selection** to enhance predictive accuracy, leveraging principles of linear modeling and **Principal Component Analysis.**
- Utilized residual analysis and influential point identification to refine models and improve the interpretability of results.

**Income Disparity Analysis** ⧉ | *R, Python, Logistic Regression*     Sep 2024 - Dec 2024
- Achieved **83.32% accuracy** in predicting income using logistic regression on the Adult Income dataset.
- Built a **logistic regression model with backward selection** to predict income, and the significance of predictors.
- Evaluated model performance using a **confusion matrix**, **AUC-ROC curves** and derived actionable insights on socio-economic patterns.

## EXPERIENCE

**Undergraduate Research Assistant, Madzvamuse Lab**     May 2024 - Jan 2025
UBC Department of Mathematics     Vancouver, BC
- Engaged in research focused on **Bayesian Methods, Ordinary and Partial Differential Equations**, to develop a model for predicting cell life expectancy under the supervision of **Dr. Anotida Madzvamuse.**
- Enhanced **ODE** and **PDE** models and Python scripts to stimulate cell population dynamics.
- **Collaborated with graduate researchers** to enhance the efficiency and accuracy for model-fitting to reproduce research outputs.

**Data Analyst, SM Exports**     May 2023 – Aug 2023
Import-Export Company     Remote, India
- Analyzed multi-source sales and **procurement data to generate insights** that improved supplier negotiations and forecasting accuracy.
- Collaborated with finance and logistics teams to clean, consolidate, and report data for quarterly reviews, **reducing manual reporting time by 60%**.

**Head Of Communications**     Aug 2023 - Apr 2024
UBC Vaccine Literacy Club     Vancouver, BC
- Directed the Marketing and Communications Committee, devising comprehensive strategies to enhance community involvement and broaden the organization's reach through innovative channels.
- Revamped online platforms using **JavaScript** to enhance visibility and user experience, boosting community interaction.

## EDUCATION

**University of British Columbia**     Vancouver, BC
Bachelor of Science in Statistics (Thematic Concentration in Economics)     Expected May 2027
- Relevant Courses: Statistical Inference, Finding Relationships in Data, Introduction to Probability, Elementary Statistics, Applied Linear Algebra, Introduction to Mathematical Computing, Intermediate Micro and Macroeconomics.
- Activities and societies: UBC Department of Mathematics, UBC Vaccine Literacy Club, Science Undergraduate Society, Alma Mater Society, Orientation Leader 24W, UBC Student Housing, UBC TACS (Tax Assistance Clinic).