# Julian Daduica

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# **EDUCATION**

## Master of Data Science (In Progress) | UBC, Vancouver, BC

Sept. 2024 - June 2025

- Academic GPA: 4.02
- Relevant courses: Supervised Learning, Unsupervised Learning, Regression, Data Structures and Algorithms, Data Visualization, Statistical Inference and Computation, Spatial and Temporal Models, Web and Cloud Computing

#### Bachelor of Science, Biochemistry and Molecular Biology | UNBC, Prince George BC

Sept. 2019 - April 2024

- Academic GPA: 3.92
- Member of Varsity soccer team for 5 years

### RELEVANT SKILLS

Programming languages R, Python (NumPy, pandas, scikit-learn, Pytorch), SQL

Machine learningLinear & logistic regression, SVM, k-NN, Ensemble Methods, Neural NetworksStatistics & ProbabilityExploratory data analysis, hypothesis testing, GLMs, spatiotemporal analysis

**Data Visualization** Altair, ggplot2, Matplotlib, Tableau, Power BI

Database Management SQL, PostgreSQL, MongoDB

**DevOps Tools** Git, GitHub, GitHub Actions CI/CD, Docker

# **PROJECTS**

### **Ezplot Software Development**

Jan. 2025 - Feb. 2025

- Developed and contributed to the creation of a data visualization Python library for generating customizable plots, including support for various chart types and interactive features.
- Implemented unit tests and maintained project documentation to ensure code quality, easy usage, and reproducibility for users and developers.
- Collaborated with a team of four members, using Git for version control to meet deadlines and deliverables

#### **Online Shoppers Purchasing Intention Prediction**

Nov. 2024 – Jan. 2025

- Developed a predictive model to analyze online shoppers' purchasing behavior using a logistic regression machine learning algorithm
- Built end-to-end pipelines for data preprocessing, model training, and evaluation using Python
- Created visualizations to present findings and insights
- Implemented Docker Environment

#### **Credit Card Default Classifier**

Nov. 2024 – Dec. 2025

- Built machine learning pipelines for credit default prediction using XGBoost and achieved 0.535 F1-score through hyperparameter tuning.
- Engineered features to improve model performance and compared results across multiple classifiers (logistic regression, random forests, and boosted trees).

### **Bioinformatics Study on Assessing Microbial Community Change**

- Assessed the role of soil bacterial and fungal communities in managed forests of the Pacific Northwest.
- Processed bacterial and fungal DNA data obtained from the Aspen thinning trial.
- Performed statistical analyses on the DNA data to determine the impact of forest management practices.
- Summarized results in a scientific report and discussed findings relative to existing literature.

# **WORK EXPERIENCE**

Laboratory Biochemist | Natural Resources Canada CanmetMINING, Prince George, BC

Oct. 2023 - Aug. 2024

- Optimize DNA extraction procedure and completed DNA extraction for peat samples exposed to mine dust.
- Performed screening PCRs for peat samples. Submit extracted DNAs for sequencing and provide raw sequence data

#### **Arena Maintenance Worker** | City of Prince George, Prince George, BC

Oct. 2022 - Aug. 2024

- Worked in a team-oriented environment to complete daily tasks and long-term projects efficiently.
- Collaborated with supervisors and provided progress reports to foremen, ensuring smooth operations.