

# Amlan Nag

Motivated, teamwork-oriented, and responsible software developer and data Analyst with significant experience in increasing comprehension of reports and presentations by the average professional. Processing a bachelor's in computing science and a professional certificated Google Data Analytics. Hard-working listing programmer with a flair for creating elegant solutions in the least amount of time.



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## WORK EXPERIENCE

### Data Analyst and Backend Developer (Internship)

#### Fiscal Realities Economists

08/2021 - Present

Kamloops, BC - Canada

##### Projects

- IDEA ("Indigenous Database of Economic Activities"): Database & Application development, Regression analysis, Implementation of ML algorithms and structural design.
- Revenue & Expenditure Analysis: Ongoing research, analyzing and deploying in MetaData.
- The Canada First Nation Cannabis Database: Completed primary research and collected data, ongoing data structure design and database deployment.
- Tulo Expected Impacts Model Application Development.
- Cannabis Jurisdiction Website: Framework and primary work ongoing.

Contact: Norm Lavallee - norm@fiscalrealities.com

### Data Analyst (Co-Op)

#### Fiscal Realities Economists

04/2021 - 07/2021

##### Projects

- The Canada First Nation Cannabis database.
- A Canadian First Nations Economic Activity database.
- Tulo Expected Impacts Model Application Development.
- Product Carbon Footprint (PCF).

### Full Stack Developer

#### Upwork

09/2020 - 04/2021

Canada

##### Tasks

- Website Development (PHP, HTML, Drupal, WordPress).
- Database Management, Android Application Development (Flutter, ReactJs, Native App).
- Project Documentation, Data Migration, Project Analysis.

## TECHNICAL SKILLS

Python Programming

Data Analysis

Data Visualization

Database design & management

MySQL, PostgreSQL

Tableau / Power BI

Data Mining

Big Data Analysis

Advance Excel Functions

Java, C++, LUA

jQuery

Unsupervised/Supervised ML Model Training

Unity

Statistical Analysis

Researcher

Financial Analysis

NLP, Algorithms Deployment, Neural Networks

Linux OS

Network Architecture

Cloud Technologies

Meta-data

Python libraries (Pandas, NumPy, Scikit-learn)

Code Refactoring

HTML, CSS, PHP Application

Jupyter lab, Apache Spark, TensorFlow

Software Testing

Agile Development Methodologies

Google Apps Script

Regression Analysis

Mobile Platform Framework

## PROJECTS

### A Software Tool for Detecting Malicious Apps on Smartphones (Research Project) (01/2022 - Present)

- Develop an efficient integrated solution for analyzing and detecting malicious activities on Smartphones by implementing of machine learning model.
- Developing testing framework, generated data analysis, implementation of ML model and proficient use of algorithms.

### Prediction of Diamonds Price - ML Project (02/2021 - 04/2021)

- This project mainly showed the accuracy of diamond price based on colour, shapes, cut and clarity using several regression models and classifications. A large-scale data set was used to get the approximate value of diamonds based on quality and previous sales records.
- Program developed in python languages where multiple libraries were used for data visualization, process data and used them to developed ML-based agent to predict price.

## WORK EXPERIENCE

### Individual Contractor Intelcom Express

04/2020 - 08/2020

Kamloops, BC - Canada

#### Tasks

- Route Coordinating & Logistics Support.
- Team Management & Broker Assistance.
- Networking Management.

### Assistant General Manager (GMIT) Dominos Valleyview

09/2019 - 03/2020

Kamloops, BC - Canada

#### Tasks

- Food order placing , Labor statistic management and Staffs Schedule Management.
- Safety Management , Product Management and Store Inspection.
- Banking Settlement and Corporate Dealing.

### Shift Manager (Assistant Manager) Dominos Northshore

02/2019 - 09/2019

Kamloops, BC - Canada

#### Tasks

- Food Management and Quality control.
- Managing Staffs, Labor Management, Sales prediction.
- Inventory Management.

### IT Support Technician Modern Tech Co

02/2018 - 06/2018

Kamloops, BC - Canada

#### Tasks

- Services and Maintain Server Side Technologies.
- Ensure the Maintenance, Administration and Security of Hardware.
- Diagnose and Treat Incidents.
- Write Procedures and Various Technical Documents.

## EDUCATION

### Bachelor of Computing Science (BCS) Thompson Rivers University

05/2018 - 04/2022

Kamloops, BC - Canada

#### Courses

- |                                       |                                     |
|---------------------------------------|-------------------------------------|
| • Database Systems                    | • ST: Machine Learning              |
| • Computer Network Security           | • Applied Artificial Intelligence   |
| • Software Engineering                | • Discrete Mathematics              |
| • Data Struc, Algorithm Analysis      | • Creativity and Innovation         |
| • Advanced Web Design and Programming | • Human-Computer Interaction Design |

## PROJECTS

### Blood-Donation (08/2020 - 12/2020)

- Android App developed using cross-platform Flutter and Dart Language.
- Using Firebase, there will be a database for all donor and patients.
- Using GPS - patients and their relatives will find the nearest hospital where they can collect blood from a donor.

### Diggums-Drones (01/2020 - 04/2020)

- Game that will help you to start learning LUA code.
- Game developed based on Minecraft game and used in an underground environment. By typing the LUA code, the user will command the drone to dig the soil.
- Game developed in Unity and using base platform as android studio.

### Mind Of Action-Combat (01/2020 - 04/2020)

- FPS Action Game, build and develop with high animation environment. Game developed with a full content view with all basic levels.
- C++ language is used to develop this game.

### Local Pizza Store Website (08/2020 - 12/2020)

- Website Developed with PHP, MYSQL Database, Bootstrap.
- Advance uses of AJAX, JSON, SPA, IFrame, PLCs.

### Solitaire\_Game (08/2019 - 11/2019)

- Using multiple classes to stand basic component use and standard game machine management.

### THE-ZOOKEEPER\_java-MazeGame (01/2020 - 04/2020)

- Game developed in IntelliJ IDEA with JAVA coding.
- The game has a colour map and designed maze to play and identify each animal.
- Union Find Java and Maze generator Java code developed to play the open hand.

### TGP Demo Website (08/2019 - 11/2019)

- A demo website for a whole Sale company.
- Develop platform : HTML, JS, CSS , Bootstrap.
- The website also builds as the base of web applications so it's a mobile-friendly website with all functionality.

## CERTIFICATES

### Google Data Analytics (06/2021 - Present)

Those who earn the Google Data Analytics Professional Certificate have completed eight courses developed by Google that include hands-on, practice-based assessments and are designed to prepare them for introductory-level roles in Data Analytics.

### Data Analysis with R Programming (06/2021 - Present)

The course covers practical issues in statistical computing, including programming in R, reading data into R, accessing R packages, writing R functions, debugging, profiling R code, and organizing and commenting R code.

### Analyze Data to Answer Questions (06/2021 - Present)

How to perform complex calculations on your data to complete business objectives. You'll learn how to use formulas, functions, and SQL queries as you conduct your analysis.

### Share Data Through the Art of Visualization (06/2021 - Present)

This course will show you how data visualizations, such as visual dashboards, can help bring your data to life. You'll also explore Tableau, a data visualization platform that will help you create effective visualizations for your presentations.

## EDUCATION

### HIGHER SCEONDARY SCHOOL B.A.F SHAHEEN COLLEGE

03/2014 - 04/2016

Dhaka, Bangladesh-1204

#### Courses

- Physics , Chemistry, Biology.
- Higher Mathematics, English.
- Information and Communication Technology.
- Statistics, Eng. Draw & Work Prac.

## VOLUNTEER EXPERIENCE

### General Secretary TRUSU Bangladesh Club

08/2020 - 07/2021

Kamloops, BC - Canada

#### Tasks

- Coordinates club activities through the executive committee and advisors
- Structures the organization to ensure continuity of leadership by providing opportunities for new leaders to develop and to be mentored
- Oversees club finances, collects dues and receives other monies

### Operational Coordinator TRUSU Bangladesh Club

08/2019 - 07/2020

Kamloops, BC - Canada

#### Tasks









- Oversee different departments working together to achieve high performance.
- Communicating the goals of management executives to the production teams.
- Collaborate with all departments to come up with realistic and efficient improvements regularly.

## LANGUAGES

English ● ● ● ● ●

Bengali ● ● ● ○ ○

## INTERESTS

-  Mountain Biking
-  Graphic Design
-  Camping
-  Hiking
-  Game Development
-  Backpacking in New Countries
-  Fishing
-  Listening Music

## CERTIFICATES

### Process Data from Dirty to Clean (06/2021 - Present)

In this course, you'll continue to build your understanding of data analytics and the concepts and tools that data analysts use in their work. You'll learn how to check and clean your data using spreadsheets and SQL as well as how to verify and report your data cleaning results.

## RESEARCH PAPERS AND PUBLICATIONS

#### Student Research Paper

### Android Operating Systems Perform the Best in Dynamic Mobile Computing Environments

Amlan Nag

Megan E. Rouault

20/04/2021

Mobile computing refers to any mobile operating system which can also be connected to a computer via a port. Mobile computing is an example of a situation where an operating system must always be flexible, dynamic and changing.

#### Student Research Paper

### Applications-of-context-free-grammars-CFG

Not Published

This project will outline the techniques for context-free grammars (CFGs) and applications. Grammar inference has been successfully applied to many diverse projects such as speech recognition and robotics. The aim of the topic will be about the applicability of grammar inference to software engineering and programming language development challenge problems. In addition, studying and creating CFG systems specifically expands a sequence of terminals into non-terminals using randomized productions.

#### Report Paper

### Prediction of COVID 19 - Vaccination Diplomacy

Not Published

Enhancing soft power, economic, political, and international relationship views of Covid-19 vaccination followed by tweets' public response and sentiment analysis.

## SOFT SKILLS

Critical Thinking   Attention to Detail   Risk Assessment

Report Writing   Pattern and Trend Identification

Experimental Design & Analysis   Effective Communication

Leadership   Team Player   Accountability

Adaptability   Enthusiastic   Conflict Resolution

Microsoft Office 365   Self-driven   Survey Creation

Creativity   UI Design   CRM   Project Management

Customer Service   Business Development

## REFERENCES

References Available Upon Request.