# SHIVANK GOEL

# **EDUCATION**

### **University of Toronto**

Sep. 2021 - Apr 2025

- Honours Bachelor of Science (HBSc.): Major in Mathematical Sciences and Applied Statistics and Minor in Computer Science
- Relevant Courses: Machine Learning, Methods of Data Analysis, Classical Geometries, Surveys and Sampling,
   Probability and Statistics, Discrete Mathematics, Mathematical Proofs, Linear Algebra, Vector Calculus, Groups and
   Symmetries, Mathematical Cryptography, Data Structures and Analysis, Software Design OOP
- University of Toronto Scholar's Award: Merit based award for being one of the most outstanding students to apply.

#### TECHNICAL SKILLS

Languages: Python, Java, C, JavaScript, LaTex, R, SQL

**Developer Tools**: Git/GitHub, Linux/Unix

Technologies/Frameworks: Android Studio, JUnit, Agile/SCRUM, HTML/CSS, XML

Mathematics: Public Key Cryptosystem, Lattice Based Cryptosystem

#### **EXPERIENCE**

#### **Data Processing Intern**

Adiksu Technologies Inc.

May 2023 - Aug 2023

Remote

- Analyzed data, developed predictive models, and improved battery system efficiency in Python and R.
- Collaborated on data pipelines, enhancing decision-making.
- Applied statistics, produced reports, and drove recommendations.

# Facilitated Study Group Facilitator

Jan 2023 - Apr 2023

Mississauga, Ontario

- Provided technical mentorship for full stack projects over 4 months (Customer Obsession).
- Taught advanced mathematical concepts to 50-student classes (Bias for Action).
- Demonstrated leadership skills in teaching and project management (Leadership).

Varsity Tutors

University of Toronto

May 2022 - Jan 2023

Mathematics and Statistics instructor

- Taught calculus, linear algebra, combinatorics, and probability concepts to high school students, along with Pre-college mathematics.
- Prepared assessments and course material (Ownership).
- Analyzed social media analytics to decide which posts will perform better, increasing engagement by 170% (Customer Obsession).

### **PROJECTS**

# Analysis of the Impact of Consulting Expenditures by City of Toronto | R, Quarto, Data Cleaning, Data Simulation, Data Analysis, Statistical Testing, R

- Conducted statistical **research** on Consulting Expenditure Data, to study expenditure trends for the consultant vendors hired by City
  of Toronto for government operations over past five years.
- Used R to conduct the research, statistical testing and cleaning and simulating data
- Utilized Git to enhance the reproducibility of the research analysis.

# Analyzing the impact of AI in students' learning | | R, Chi Square Testing, Logistic Regression, Data Analysis, Statistical Testing

- Led a comprehensive study, analyzing the impact of integrating Artificial Intelligence in student learning.
- Investigated variables like familiarity, benefits perception, tool efficiency, accuracy, utilization methods, and recommendation, uncovering significant correlations between AI usage patterns and recommendations in R.

#### 🗞 CHRONOS | Java, SOLID, Git, Scrum, Agile, UML Diagrams, SDLC, M.V.C, Design Patterns

- Built a web-based Time Management System with time-table builder and goal accomplishment appraisal system.
- Created a user-friendly design with IntelliJ, increasing user engagement and efficiency by 30%
- Utilized **Agile Methodologies, Git**, and **Scrum** Meetings to work efficiently in a team of four developers.