# Parmvir Grewal

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Results-driven professional with experience in spatial data science, programming, and remote sensing integration. Skilled in software tools and languages such as ArcGIS, QGIS, ERDAS Imagine, Python, Java, and C with proficiency in geospatial analysis techniques and information technology. Adept at utilizing geospatial tools and programming languages to create impactful solutions in areas such as environmental science, urban planning, data analysis, and software development.

#### **EDUCATION**

University of Toronto Mississauga, Ontario

HBSc, Major in Geographic Information Systems, Minors in Computer Science and Environmental Management

2018 <u>- 2023</u>

• Key Modules: Software Design, Principles of Programming Languages, Geographic Information Processing

# PROFESSIONAL EXPERIENCE

# Hardwood Flooring Outlet

Concord, Ontario

Website Developer & Manager

September 2020 - August 2022

- Built and launched a fully functional e-commerce WordPress store, overseeing all aspects of the project from domain and hosting setup to product creation and plugin installation, boosting sales revenue by 40%.
- Lead the development and execution of targeted marketing campaigns, including Google Ads and Facebook Ads, resulting in a 45% increase in website traffic and a 20% increase in customer acquisition.
- Implemented website optimization techniques, including SEO and landing page optimization, resulting in a 25% improvement in customer conversion rates, showcasing key management skills.

Revo Health Toronto, Ontario

Front End Web Developer

July 2019 – August 2019

- Developed and executed a responsive homepage and login page for Revo Health using HTML, CSS, and JavaScript, to drive website traffic.
- Collaborated with a cross-functional team of 3 developers and designers using GitHub and Git, following agile programming and sprint methodologies to complete 100% of project tasks within set deadlines.

#### PROJECT EXPERIENCE

## **Software Tools and Systems Programming**

<u>January 2022 – April 2022</u>

- Designed a fully functional shell in C, including dynamic memory allocation for variable storage and error handling and incorporated advanced features such as recursive file traversal, background processing, and multi-connection server capabilities.
- Implemented a wide range of functionalities that outperform built-in shells in many ways, including the ability to handle complex tasks with ease. Built-in commands such as echo, ls, cd, cat, wc, pipes, bg, kill, ps, and exit demonstrate the breadth of functionality and versatility of the shell, displaying excellent critical thinking skills.

#### **GIS and Remote Sensing Integration**

<u>January 2022 – April 2022</u>

- Oversaw a comprehensive group research project investigating the impact of urban sprawl on Halton Region's demographics and physical environment.
- Utilized a multi-faceted approach, combining satellite imagery, spatial and non-spatial data, and advanced analytical tools to develop a detailed understanding of the effects of urban sprawl.
- Led detailed analysis using NDVI, NDBI, and supervised classification maps to quantify the extent of urban sprawl and its impact on the environment, exhibiting attention to detail.

# **GIS and Population Health**

January 2022 – April 2022

- Spearheaded independent research on hospital accessibility in northern British Columbia, utilizing geospatial tools, route files, network data sets, and census data to develop a comprehensive understanding of the region's healthcare access challenges.
- Conducted drive time analysis to identify areas of the region with the greatest unmet needs, in a push for the development of new healthcare facilities

#### **Spatial Data Science II**

January 2021 – April 2021

- Led a group research project investigating air quality across 5 US states, collecting and analyzing data from over 1,000 air quality monitoring stations.
- Conducted advanced spatial analysis using IDW Interpolation, Kriging, Cluster Analysis, Empirical Variograms, and the Skater Algorithms on 2013 US EPA air pollution data to identify significant factors impacting ozone formation.

#### TECHNICAL EXPERIENCE

Workspace: Microsoft Office Suite, Google's G Suite

Coding: Python, Java, C, HTML, CSS, JavaScript, React, R, Git, Haskell, Racket, R Studio, ArcGIS Online, ArcGIS Pro, ArcMap, ERDAS Imagine, Visual Studio Code, PyCharm, Eclipse

Other: WordPress, Google Ads, Facebook Ads, Google Analytics, Google Cloud, Photoshop

#### **OTHER**

**Interests:** Basketball (1-3 times a week), Gym (4-5 times a week), Reading Books (1-3 times in week)

Languages: English (Fluent), Punjabi (Fluent)