📞 (+1) 647-515-3874 | 🔀 vik.grover71@gmail.com | 🏠 vikgrover.me | 🔾 VikramGrover | **in** Vikram-Grover

# Education

**University of Waterloo** · Honours Bachelor of Computer Science

Sep. 2016 - June 2021

• Cumulative GPA: 80.92% | Major GPA: 84.29%

# Skills

**Languages/Frameworks** Python · JavaScript/HTML/CSS · React · Ruby on Rails · C# · SQL

**Databases** MySQL · PostgreSQL

**Tools** Git · AWS (S3, Relational Database Service) · Postman

# **Work Experience**

#### **Redfin** · Software Engineer Intern, Home Valuation

June 2021 - Aug. 2021

• Incoming Summer Intern at Redfin's Home Valuation Team

## **Scribd** · Software Engineer Intern, Payments

Jan. 2020 - Apr. 2020

- · Reduced payment collection pipeline run time by 96%, by identifying and removing bottlenecks in database queries, using Ruby on Rails and MySQL
- · Built a logging system from scratch to track over 1 million user accounts, for early detection of account-related suspicious activity
- · Improved user satisfaction by 12%, by finding and addressing flaws in the promo code processing workflow

## **Flipp** · Software Engineer Intern, FAdmin

May 2019 - Aug. 2019

- · Maintained Flipp's monolith FAdmin web app that powers Flipp's platform by processing over 2M products/month using Ruby on Rails and MySQL
- Developed robust web scrapers for various retailer websites to scrape vital product information that would be consumed by millions of users
- · Automated ingestion and sorting of digital flyer data from retailers for timely processing on FAdmin using Ruby and AWS S3

# **NuSoft Solutions** · Software Engineer Intern

Sep. 2018 - Dec. 2018

- Independently built, tested and deployed features for a business card scanner app with 1000+ users using Ionic Framework, Angular and TypeScript
- Improved processing time on high-resolution images by 48% by integrating image compression into the pipeline
- Significantly enhanced user experience by implementing authentication token renewal using Azure Active Directory

# **Dye & Durham Corporation** · Software Engineer Intern

Jan. 2018 - Apr. 2018

- Developed and shipped RESTful APIs that interact with government systems to validate business registration data using ASP.NET (C#) and SQL Server
- Utilized Postman for regression testing of the APIs

#### **BMO Financial Group** · Software Engineer Intern, Capital Markets

May 2017 - Aug. 2017

• Streamlined trader operations on internal web app by developing trader requested features using ASP.NET (C#), Oracle database and SQL Server

# **Projects**

# **Pathfinding Algorithms Visualizer** vikgrover.me/pathfinding-algorithms-visualizer

Mar. 2021 - Apr. 2021

- Built a performant and clean visualization tool for pathfinding algorithms such as Dijkstra's, A\* (A-Star) and more using React
- Incorporated ability to draw/generate random obstacle mazes and patterns to allow for an interactive experience

#### **FlappyBird AI** github.com/VikramGrover/flappy-bird-ai

Dec. 2020

- Developed a playable FlappyBird game with similar-to-original physics and visuals using Pygame and Python
- · Integrated a self-learning AI player that uses an evolutionary algorithm to incrementally improve playing performance using NEAT-Python library

### Image Repository github.com/VikramGrover/image-repo

Aug. 2020

- · Designed and developed a web app to serve as an image gallery for cloud-stored images using Ruby on Rails and PostgreSQL
- Utilized AWS to store uploaded images on S3 and host a PostgrSQL database on Amazon RDS (Relational Database Service)
- Leveraged Google Cloud Vision API's image labelling feature to support content-based and reverse image querying on the app

### "AutoPipe": Flipp Hackathon Project

July 2019

- Designed and developed a POC smart web scraper that aimed to reinforce Flipp's unreliable web scraping workflow using Django (Python)
- · Utilized IBM Watson Natural Language Understanding to train deep learning models to identify and scrape relevant content from web page