

# Rudy Patel

[Email](#) | [Portfolio](#) | [LinkedIn](#) | [Github](#)

## Experience

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### **Morgan Stanley** - Software Engineering Intern

**Summer 2020 - Present | Canada**

- Added transfer functionality to a wealth management platform with 500,000+ logins per month
- Improved transfer performance by 10% after adding dividend support
- Maintained & developed new features for a 20 year old code base that transacts \$10+ billion per year

### **AlbertaLoop** - Software Team

**Fall 2019 - Present | Canada**

- Designed & implemented a graphical user interface used to analyze & control a HyperLoop pod
- Researched, summarized, & documented HyperLoop pod requirements specified by SpaceX

### **Good Hoops** - Basketball Coach

**Spring 2018 - Present | Canada**

- Designed concentrated practice plans to develop player skills for elite-level high school athletes
- Organized various logistics such as team travel, international trips, and fundraiser event planning

## Education

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### **University of Alberta** - Class of 2022

- **B.Sc. Computer Engineering**
- Student clubs: AlbertaLoop, AlbertaSat
- Coursework: Object-oriented, Operating systems, Database management

## Software Skills

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**Languages:** Java, Python, C/C++, Matlab, Swift, Go

**Worked in:** SQL, Git, HTML5, CSS, Javascript, React

**Interests:** AI, Cloud, Fintech, Computer vision, Mobile

## Projects

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### **Driving Route Finder** - Arduino application

**Fall 2018 | Canada**

- Similar to Google Maps, an optimal driving route is calculated between two points in Edmonton
- Implemented touch screen and joystick support, where the user can interact with the map

### **Live Weather** - Web application

**Winter 2019 | Canada**

- Allow users to search for a city, then display up-to-date weather information and forecasts
- Created in under 8 hours during a hackathon, the weather data is queried from a RESTful API

### **Periodic Table Database** - Arduino application

**Winter 2019 | Canada**

- An intuitive way to browse, search, & visualize the numerous elements on the periodic table
- Includes touch support, predictive/autocomplete search functionality, & configurable UI layouts

### **Other Work/Projects**

- Developed a unix shell clone, to learn multithreading along with resource & process management
- Created an encrypted Arduino chat using client/server communication protocols and key generation
- Programmed a native iOS app that implemented a simple to-do list to learn Swift & XCode
- Used Pygame to create an arcade-like side scrolling shooter with custom 2D physics and basic AI
- Created a facial recognition program that identifies/classifies JPEG images provided by the user

## Other Achievements and Interests

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- Captain for Team Alberta Basketball which competed at a national level all over Canada
- Along with coaching basketball for kids, also working towards player development & skill training
- Recognized as Male Athlete of the Year in high school for excellence in multiple sports