RILEY MORRIS

(647) 469-0777 | riley.morris@alumni.utoronto.ca | linkedin.com/in/riley1morris | https://riley-collab.github.io/personal

EDUCATION

Bachelor of Applied Science, University of Toronto   **June 2022**
Electrical & Computer Engineering, Minor in Business, Leadership & Communications Certificates

SELECTED TECHNICAL SKILLS

Languages: C, C++, Java, Python, Javascript, HTML, Swift, Tailwind, SQL, ReactJs, TypeScript, Terraform
Frameworks: MongoDB, ElasticSearch, NodeJs, NextJs, AWS CP, AWS Developing Serverless Solutions

PROFESSIONAL EXPERIENCE

Software Engineer, Sanofi   **October 2022 - Present**
- Developed reusable, responsive and accessible components and front-end library (Elements)
- Modernized front-end codebases by implementing Elements library components, resulting in improved code efficiency and user experience
- Swiftly created and iterated on UI mockups to facilitate project planning and stakeholder alignment
- Leveraged ReactJs to develop front-end features that increased user experience for over 10,000 employees
- Optimized SEO by adding a dismax query in ElasticSearch to increase recall in the search without loss of relevancy

Software Developer, Nference   **January - April 2022**
- Developed a blend of backend and frontend features to build a user interface that discovered medications in various research papers for biomedical applications
- Implemented algorithms and data structures using Python to build an autocomplete feature
- Architected and developed responsive layouts and engaging user experiences using ReactJs

Market Analyst, TMX Group - Equity and Derivatives Trading Products   **May - August 2021**
- Provided quantitative and strategic support in product design to foster the growth of TMX products
- Developed data-based insights to optimize client interactions with Equity Trading products

Research Analyst, Virtu Financial   **May 2019 - May 2020**
- Analyzed trading data for 90 institutional clients to identify trends and patterns in trade execution performance as part of the Global Transaction Cost Analysis team
- Developed analytics reports and presentations to illustrate client-specific algorithmic performance

SOFTWARE ENGINEERING PROJECTS

Recipe Web Application
- Created a web application for recipe searches and management in ReactJS
- Utilized MongoDB to update and manage web application with over 100 custom recipes

Relationship Management Library
- Designed and built a javascript library in vanillaJS for identifying and viewing the relationship between two nodes using unique data structures to represent the different connections
- Used Canvas API to visualize the graph structure on the DOM
- Created a step-in feature to allow users to click on the mouse cursor to traverse through the graph

Database Design: FIFA World Cup Database (Language)
- Designed and developed a FIFA World Cup database to identify trends for winning the World Cup tournament

Web-Based Navigation UI and Algorithm (C++)
- Led the research, design and development of an online navigation tool, a Google Map competitor, designed user interface for usability and responsiveness, and developed numerous performance-driven algorithms (A* and Dijkstra) to optimize travel time