# Jan Jelinek

JanJelinek.dev@gmail.com ♦ (825) 712-0840 ♦ github/Jan-Jelinek ♦ JanJelinek.ca

# **FDUCATION**

# **Bachelor of Science, Computer Science**

SEPT 2018 - APRL 2022

UNIVERSITY OF CALGARY

#### **Relevant Coursework:**

- Networks: Computer Networks, Introduction to Distributed Systems
- Databases: Design and Implementation of Database Systems, Data Base Management Systems
- Data Structures: Data Structures, Algorithms, and Their Analysis, Design and Analysis of Algorithms I

# TECHNICAL SKILLS

Languages: C++, C#, Java, Python, Julia, JavaScript, HTML/CSS

Frameworks: React, Node.js, Next, ASP.NET, Blazor

Databases: SQLite, PostgreSQL, MongoDB

# **WORK EXPERIENCE**

#### **UNIVERSITY OF CALGARY | RESEARCH ASSISTANT**

Calgary | JAN 2022 - PRESENT

Defi Reseach - Professor Alfred Lehar

- Designed an algorithm which detects transactions that involve the block miners and/or send private transfers to the miner using **Go Ethereum** tracing.
- Regularly updates a **PostgreSQL** database as it searches through millions of ethereum blocks.
- Utilized **concurrency** to simultaneously process up to 30 blocks.

# **PROJECTS**

#### COMPETL ☑

REACT, EXPRESS, NEXT, MONGODB

SENG 513 Group Project

- A competitive word guessing game with a timer and leaderboard.
- My contributions include: Using **Next-Auth** to implement user authentication and authorization. Implementing parts of the main gameplay such as the timer and proper tile coloring. Creating a share feature which reads local data and stores it into clipboard.

### STOCK SENTIMENT TRACKER

DJANGO, PYTHON, JAVASCRIPT, SQLITE

SENG 581 Group Project

- A tool which allows users to see the sentiment of stocks using tweets based on what people tweeted about the stock in the past 24hours.
- My contributions include: Setting up and managing the backend with **Django**. Created a simple and intuitive user interface using **Bootstrap**. Identifying and calculating the sentiment of all emoji in a tweet.

#### BANDWAGON [7]

ASP.NET. REACT. SQLITE

CPSC 481 Group Project

- A web app that allows users to create accounts, earn points by voting on NBA games and spend points on fictional prizes.
- My contributions include: Designing and implementing the database, and implementing several pages such as the store and leaderboard in both mobile and desktop friendly designs.