# Alan Hagedorn

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#### **EDUCATION**

University of Minnesota

Bachelor of Science in Computer Science

University of Minnesota

Dual Enrollment, 4.0 GPA

Concordia University

Dual Enrollment, 4.0 GPA

Twin-Cities, MN

Graduation expected in 2024

Twin-Cities, MN

Sept. 2019 - May 2021

St. Paul, MN

Sept. 2019 - May 2020

## TECHNICAL SKILLS

Technical Skills: Python, Java, Kotlin

Web & Design: HTML5, CSS3, Bootstrap4, Django Database Experience: PostgreSQL, SQLite, Firestore Developer Tools: Git, VS Code, IntelliJ, Android Studio

# PROJECTS

SkateShare | Kotlin, Dagger Hilt, Firebase, SQLite, Maps APK, LeakCanary

July 2021 - Present

- Developed an MVVM android app for users to record and share electric skateboarding routes
- Used Firebase for an infinitely-scrolling feed of media posts, customizable user profiles, and route sharing
- Utilized geospatial queries with Firestore for saving and sharing routes to a global map
- Used Room, SQLite, and MPChart to save and visualize data from private routes
- Used De Boor's B-Spline algorithm to smooth and interpolate raw route data
- Was exposed to android development, MVVM architecture, dependency injection, Firebase, and geo queries

#### Grade Analysis and Prediction Webapp | Python, Django, React, PostgreSQL

April 2021 – June 2021

- Developed a web application for professors to upload, analyze, and visualize course data
- Implemented grading curve suggestions and future assignment predictions based on past scores
- Acquired database skills by writing and refactoring models, improving performance
- Was exposed to Django, Pandas, SQL, CRUD applications, and Bootstrap4

# Digital Resume | HTML, CSS3, Bootstrap4

July 2021

• Developed a github.io portfolio site for displaying projects in depth and a some information about me!

### Four Key Osu! Mania Bot | Java, Robot

April 2021

 $\bullet$  Developed a bot which plays Osu! Mania with near 100.00% accuracy, higher than the current global record.

# Miscellaneous

Eagle Scout November 2020

- Participated and helped lead in a Boy Scout troop for 5 years
- Served local and global communities through over 70 hours of service projects.

## Dean's List

• Present on the Dean's List twice at Concordia University, once at the University of Minnesota.