# Joseph Wicorek

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#### **EDUCATION**

# University of Washington, Information School

Seattle, WA

Bachelor of Science in Informatics, Concentration: Software Development/Data Science

2025

#### Projects

#### AI Health Connect | TypeScript, SQL, TailWind, Supabase, ReactJS, Vite

Winter 2025

- Engineered a virtual clinic platform delivering 5 AI-powered features with 100% provider satisfaction in pilot testing.
- Integrated OpenAI LLMs to build AI driven decision support tools, reducing manual workload and enhancing treatment accuracy for over 50 simulated patient interactions.
- Implemented HIPAA-compliant backend infrastructure with role-based access, TLS encryption, and audit logging ensuring secure handling of patient data.

## NBA Performance and Strategy Analytics | Python, Pandas, Matplotlib, Seaborn, Pytorch

Winter 2024

- Built a predictive analytics model using 20+ years of NBA data to analyze player stats and game outcomes, increasing prediction accuracy by 30%
- Designed a data pipeline that processed 500K+ records using Pandas and Statsmodels, reducing preprocessing time significantly.
- Visualized advanced metrics like PER, usage rate, and win shares using Matplotlib and Seaborn to uncover
  performance trends and support strategic decision-making.

# Railroad Safety Protocol | R, Shiny

Winter 2023

- Built an interactive Shiny dashboard visualizing 215K+ U.S. railroad incident records by state, cause, and time period to uncover safety patterns.
- Implemented user-controlled filters, heatmaps, and time-series plots to enable custom analysis of derailments, equipment failure, and hazardous material leaks.
- $\bullet$  Cleaned and standardized raw data with dplyr and lubridate, improving accuracy in temporal trend analyses and reducing data wrangling time by 30%

# Know Your Terms | Python, TypeScript, HTML, CSS3, NodeJS

Fall 2024

- Developed a browser-based platform that parses Terms of Service using NLP techniques to flag confusing or potentially exploitative clauses.
- Created a grading algorithm based on legal readability and fairness, allowing users to compare agreements across different sites.
- Implemented a fully responsive frontend in React with real-time analysis and a REST API backend, ensuring performance across devices.

#### Internship Database | SQL, TSQL

Fall 2023

- Designed a normalized relational database schema to manage 2,000+ internship applications, optimizing storage and query efficiency.
- Authored advanced SQL queries using subqueries, JOINs, and aggregate functions to uncover trends in application success and company preferences.
- Created custom views and analytical queries to summarize application volume, seasonal demand, and offer rates.

# EXPERIENCE

#### Software Engineer

May 2024 - Present

Outlier AI

Seattle, WA

- Ran A/B testing on AI-generated outputs and fine-tuned evaluation criteria boosting response quality by 15%.
- Developed and evaluated AI-generated code, ensuring accuracy and efficiency in alignment with requirements.
- Created and assessed technical prompts and responses, contributing to the training of AI models.

# TECHNICAL SKILLS

Languages: Python, JavaScript, TypeScript, R, SQL, HTML5, CSS3

Frameworks & Libraries: ReactJS, NextJS, NodeJS, Vite, Bootstrap, ExpressJS, Shiny, NumPy, Matplotlib, Pytorch

Tools & Platforms: Postman, Git, Azure, PowerBI, Figma, Miro, Supabase, Firebase

Databases & APIs: Firebase, Supabase, PostgressSQL, OpenAI, REST APIs