

# ROMAN SOSIAK

518-312-5911 | [roman.sosiak@gmail.com](mailto:roman.sosiak@gmail.com) | [linkedin.com/in/roman-sosiak](https://linkedin.com/in/roman-sosiak) | [github.com/rsosiak](https://github.com/rsosiak)

## EDUCATION

### **BS, Computer Science | GPA: 4.0**

*Oregon State University*

Expected Dec. 2023

*Corvallis, OR*

### **BS, Chemical Engineering**

*University at Buffalo*

Aug. 2010 – May 2014

*Buffalo, NY*

## PROJECTS

### **Trading Card Game (TCG) Catalog and Wish List** | *JavaScript, MongoDB, Express, React, NodeJS*

- Engineered a full stack web application, allowing user to maintain a TCG card catalog and wish list
- Implemented backend with NodeJS and Express to execute CRUD operations via REST API route endpoints, storing persistent data between sessions using MongoDB
- Designed frontend UI components using React, HTML, CSS
- Interfaced with Pokemon TCG API, allowing users to quickly retrieve card metadata

### **Medicaid Recipient Summary Profile** | *JavaScript, OracleDB, Express, React, NodeJS*

- Produced a web application that allows a user to view a Medicaid recipient's claims data and exception codes
- Fetched data from Medicaid data warehouse with oracledb Node module and presented on frontend using React hooks
- Enabled filtering of claims by date range and service type

### **Discrete Math Homework Helper** | *TypeScript, React, React Router, NodeJS*

- Constructed a client-side website that solves and provides step-by-step solutions to discrete math problems for multiple topics
- Developed functionality to generate practice problems for user to solve
- Devised an interactive frontend using TypeScript, React, HTML, CSS

### **Hasami Shogi** | *Python*

- Developed a backend framework for the two-player board game Hasami Shogi
- Crafted text-based visualizations, allowing users to play game in terminal
- Applied OOP principles and data structures to break down relationship between players, game pieces, and game board
- Utilized unit tests and integration tests (via unittest library) to ensure bug-free code

## EXPERIENCE

### **Senior Business Intelligence Engineer**

*Research Foundation for Mental Hygiene*

May 2019 – Present

*Albany, NY*

- Set up automated ETL data pipelines using Python, Luigi, Oracle SQL, and SSIS, processing millions of rows of data weekly
- Created a web application allowing users to view a summary of a Medicaid recipient's profile, saving hours of manual querying
- Built and maintained tabular data models and BI reporting dashboards used by 15+ analysts and program managers
- Trained staff on best practices regarding use of BI dashboards to answer data-related questions
- Led 5 person data team in effort to improve documentation of data dictionaries, data flows, and schema design
- Refactored and optimized SQL queries using execution plan and index tuning, improving query times by 20x
- Prototyped transition of a project management system from Excel spreadsheet to web application using Flask, TypeScript, and React, aiming to increase productivity and better prioritize projects for completion

### **Data Analyst**

*Ellis Medicine*

Jan. 2019 – May 2019

*Schenectady, NY*

- Developed Python scripts to automate the creation and distribution of monthly Excel data reports, decreasing time spent by 100x
- Built analytical tools in Excel to monitor KPIs, verifying hospital met contractual and regulatory guidelines
- Collaborated with cross-functional teams (nurses/physicians, IT) regarding data reporting tools and needs

## TECHNICAL SKILLS

**Languages:** Python, JavaScript/TypeScript, SQL, HTML/CSS

**Technologies/Frameworks:** Flask, React, Express, Luigi, NodeJS, Git

**Databases:** Oracle SQL, PostgreSQL, MySQL, MongoDB