

Owen Ratgen

Minneapolis, MN

651-210-0149 | ratge006@umn.com

linkedin.com/in/owen-ratgen | github.com/OwenRatgen | owenratgen.github.io

EXPERIENCE

Software Engineering Intern

May 2024 – Present

Trane Technologies | TypeScript, React.js, Jest, MUI, GitLab

St. Paul, MN

- Built an internal frontend library to standardize React components and applications across various internal tools, resulting in a 20% decrease in page loading time due to efficient component design and lazy loading strategies
- Decreased backend feature development time by 40% through simple, reusable components and applications
- Adopted by 5+ teams within the company enhancing cross-team collaboration and consistency
- Collaborated with the design and development teams to ensure the library meets branding guidelines and functional requirements

Software Engineering Intern

June 2023 – December 2023

SPS Commerce | TypeScript, Python, Unit Testing, GitHub

Minneapolis, MN

- Streamlined TypeScript application by introducing GraphQL, led to an 80% increase in developing efficiency
- Led efforts on refactoring code from Gramps to Apollo Server on a team of 3 other interns
- Enriched application by migrating and adding a total of 20+ data sources to enhance query management
- Contributed to the company's Keystone API by implementing schema options for filtering which let developers search for a schema stored by its version, domain, and type

Software Development Intern

June 2022 – August 2022

Infor | JavaScript, Java, Jest, SQL, Git

Remote

- Developed a client facing process monitoring tool for user-inputted information, significantly enhancing the order management process through the use of full stack development
- Reduced the time users spent searching for orders by 50% through an optimized filtering system, improving operational efficiency
- Performed integration testing using JUnit on bug fixes and new features

EDUCATION

University of Minnesota

Minneapolis, MN

Master of Science in Computer Science

Expected Graduation: December 2025

- **Cumulative GPA:** 3.915

Bachelor of Science in Computer Science

September 2020 - May 2024

- **Cumulative GPA:** 3.633, **Technical GPA:** 3.569

PROJECTS

Virtual Pantry | Azure,

December 2023

- Deployed a dynamic web application onto Azure to help assist users with meal planning by utilizing ingredients available in their pantry
- Enhanced user experience through an intuitive user interface using React.js and Bootstrap libraries to provide seamless meal suggestions and highlight missing ingredients for specific recipes
- Fetched recipes and food data from Spoonacular API and stored the information in a Azure Cosmos DB
- Optimized performance and responsiveness, ensuring a smooth user experience across various devices

Social Media Caption Classifier | Python, TensorFlow, PyTorch, Pandas

May 2023

- Engineered a BART model featuring one-hot encoding and tokenization to effectively classify a caption from a result of a sports game as either a win, loss, or overtime loss
- Curated the training dataset with relevant data and achieved an overall accuracy of 76.67%

TECHNICAL SKILLS

Experienced Languages: Python, Java, JavaScript

Familiar Languages: NoSQL, HTML5, CSS

Frameworks: React.js, Node.js, Flask, Jinja2, Jest, JUnit

Developer Tools: Azure, Docker, Jira, GitHub, VS Code, Eclipse

Libraries: Pandas, TensorFlow, PyTorch