

SAIKRISHNA TADEPALLI

SOFTWARE ENGINEER INTERN

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EDUCATION

University of Waterloo

Sept. 2020 - May 2025

Bachelor of Computer Science and Financial Management

Relevant Coursework: Data Structures & Algorithms, Object-Oriented Programming & System Design, Functional Programming

SKILLS

Languages: C#, C/C++, GraphQL, HTML/CSS, Java, JavaScript, Python, TypeScript, Unix-BASH

Tools: AWS, Azure, ExpressJS, Git, MongoDB, NodeJS, Pandas, React, React Native, Unity

EXPERIENCE

Foodie · Software Engineer, Intern

Sept. 2022 - Dec. 2022

Toronto, Ontario

- Developing an app in **React Native** for foodies to review, share, and discover restaurants
- Enabled users to share restaurants and recommendations over several social media platforms including Instagram, and Twitter
- Implemented **real-time searching and filtering** of restaurants, a feature **requested by over 80% of users**, using **Algolia** search engine
- Utilized **AWS Lambda** to send users **push notifications** that update them on new social activity, **increasing engagement** by **30%**

Technologies: JavaScript, TypeScript, React Native, Redux, AWS Amplify, AWS Lambda, AWS Cognito, DynamoDB

Huawei Technologies · Software Engineer, Intern

Jan. 2022 - Aug. 2022

Toronto, Ontario

- Expanded the capabilities of MindSpore, an AI computing Framework, by implementing distributed DataFrame APIs in **Python** and **C++**
- Achieved up to **80% increased speed** in creating a parallelized DataFrame object from a CSV file by developing a distributed **FastReadCSV API**
- Implemented a **unit testing** suite and **data infrastructure** that measures DataFrame API correctness and performance using **Pandas Testing Library** and **Numpy Testing Library**

Technologies: C, C++, Python, Pandas, Numpy

LeapThought NZ · Software Engineer, Intern

May 2021 - Aug. 2021

Toronto, Ontario

- Improved speed of fetching & displaying JSON data by **15%** using **ASP.NET web APIs** in **React** and refactoring 30+ **SQL queries**
- Introduced inline email feature, now used by over **20 organizations**, with **React**, **SharePoint APIs**, and **C# Smtplib class**
- **Reduced downtime** by **45%** and scope for human errors by 20% by automating mass data transfer between SharePoint sites with **SharePoint Online Management Shell**
- Leveraged **PowerShell** to query for data above SharePoint's query threshold without increasing the limit, **improving site performance** by **80%**

Technologies: JavaScript, Java, C#, SQL, React, ASP.Net, Microsoft SharePoint, Microsoft PowerShell

PROJECTS

Member

- Developed a scalable mobile app that allows university students to access club services and allows clubs to manage their operations
- Implemented **GraphQL APIs** in **NodeJS** to store data in **MongoDB** and support operations related to Clubs, Users, Memberships, Auth, and Permissions
- Used **Apollo Client** to connect the front-end React Native app to the backend, hosted on an **AWS EC2 instance**

Technologies: JavaScript, TypeScript, Node.js, Express.js, GraphQL, MongoDB, React Native, AWS EC2

Artificial Light Detection and Mapping

- Collaborated with a team of 4 to engineer a photometer to measure ambient light levels using an **Arduino Uno**, photoresistors, and proximity sensors
- Wrote **Arduino** and **Python** scripts to collect and analyze data received from photometer over a 3-month period
- Achieved **35% reduced net light usage** and installation of dimmers + sectional lights in 15 classes by presenting collected data

Technologies: Arduino, C/C++, Python, Linux, BASH

ACTIVITIES

UW Data Science Club · VP of External Affairs

Sept. 2021 - Current

- Led a team of 7 in organizing **2 Hackathons**, **6 Info Sessions**, and **10+ Networking Events** with companies such as Meta and Google
- Delegated tasks to the EA team resulting in **3 sponsors** and **20+ speakers** joining club events
- Organized and mentored E-LeetCode events, **aiding over 45 students** to prepare for technical interviews