

Kenneth Ye

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TECHNICAL SKILLS

Languages: JavaScript, TypeScript, Python, Java, C, C++, Bash, HTML, CSS, SASS, SQL, Racket, Solidity

Frameworks/Libraries: React, Node, D3, Express, Django, MongoDB, Docker, Numpy, Pandas

Developer Tools: Git, Linux

EXPERIENCE

Freelance Full Stack Developer

Aug 2024

Chemsyn Services Inc.

Remote

- Decreased time spent creating Hubspot quotes by **20%** by automating custom item price fetching from Netsuite
- Utilized **Docker** to containerize the quoting tool application, ensuring consistent deployment across development and production environments, and facilitating easy scaling and updates.
- Hosted the application on Render.com achieving **99%** uptime

Full Stack Developer

May 2024 - Aug 2024

IDI Itech Development

Richmond Hill, ON

- Reduced time spent managing timesheets of **200+** employees by **30%** by creating features like retroactive employee clock-in time adjustments, remote clock-in requests and proxy login flagging for a proprietary clock in system
- Developed a proprietary inventory ERP system, reducing delivery times by **15%** by enabling tracking of inventory, seamless catalog management, and management of product shipments, improving operational efficiency.

Math and Science Tutor

Mar 2022 – Feb 2023

Schoolhouse World

Remote

- Attained a **top 5%** ranking out of **10,000+** tutors, evidenced by **101** positive ratings and **61** super helpful ratings
- Tutored **60+** sessions in AP Calculus, AP Physics, and AP Chemistry, benefiting **83** learners across **11** countries
- Audited fellow tutors' sessions to maintain and enforce the platform's guidelines and rules, enhancing the overall tutoring quality and safety of the platform

PROJECTS

🔗 ChariTree | *Django, PostgreSQL, React, Node, Solidity*

- Won \$1700 CAD for **Top 1 Most Innovative Subnet Idea/PoC** at the 2024 HawkHacks hackathon
- Created a **blockchain**-based donation platform which tracks how user donations are spent using **smart contracts**
- Developed a **Django** backend connected to a **PostgreSQL** database to handle user authentication and process charity, user, and transaction data

🔗 AccessibleGPT | *Express, React, Node, MongoDB*

- Built an accessible AI chat app featuring text-to-speech and high contrast mode using **React** and **Express**
- Achieved AI-driven responses to user messages and text-to-speech capabilities, by creating a **Express** web server to handle frontend **HTTP** requests in compliance with RESTful API standards, leveraging OpenAI's GPT API
- Implemented token-based user authentication with **OAuth2.0**, ensuring privatization of chat logs by user
- Optimized database data storage and retrieval, resulting in a **20% improvement** in query performance, and reducing latency for real-time interactions

🔗 Aho-Corasick Algorithm Visualizer | *React, Node, D3*

- Built an interactive **Aho-Corasick** algorithm visualizer by using **React** and **D3** to create a web app which produces a dynamic visualization of traversing the Aho-Corasick **finite-state machine** (FSM)
- Represented the Aho-Corasick FSM by creating a tree data structure using Objects and recursively parsed the tree into JSON for **D3** to visualize, resulting in a intuitive implementation and visualization of the algorithm

EDUCATION

University of Waterloo

Waterloo, ON

Bachelor of Computer Science (Co-op)

Sep 2023 – Present

- Cumulative Average: 91.6% (3.94/4.0 GPA)
- Relevant Coursework: Object-Oriented Software Development, Linear Algebra 2 (Honours), Elementary Algorithm Design and Data Abstraction, Tools and Techniques for Software Development, Designing Functional Programs