HONGYUAN LIU



SUMMARY

A passionate Final-year student at University of Toronto, double specialist in Computer Science & Data Science. Expertise in Full Stack Mobile/Web App Development, Machine Learning, Team management. Actively contributing to 10+ projects, business startups, over 1000+ contribution on GitHub. Learning more about me at liustev6.ca

EDUCATION

Bachelor of Science 2020-2025

University of Toronto, Toronto, ON

- Double Specialist in Data Science and Computer Science
- President of UofT Tutoring Club
- Named as Dean's List Scholar for the 2021, 2022, 2023 academic year
- Cumulative GPA of 3.9

TECHNICAL SKILLS

- Mobile App Development Flutter, Kotlin, Swift, React Native
- Web Development HTML/CSS, React/Next.Js, JavaScript, TypeScript
- Backend Development AWS,
 Django, Firebase, GCP, Flask
- Machine Learning R, CV, NLP, AI, DL, Visualization, TensorFlow/Pytorch
- Data Engineer PostgreSQL/SQLite NoSQL, JSON, Excel, DBMS
- Others Python, C, Java, Figma Design, OS – Linux, File System, Docker, VM, Containers

STARTUP EXPERIENCE

FOUNDER AND PROJECT LEARER - DEMO HERE1

Campus Eats | Toronto, ON | May 2023 - Current

- Design, develop & launch Campus Eats Mobile App, Campus Eats Website tailored to revolute UofT's dining experience.
- Contribute 30K+ lines of code, 20+ features in Full stack mainly with Flutter, Next.js, Firebase. Design No-SQL Database with 10+ tables.
- Demonstrate effective project leadership by leading multiple diverse teams of 15+ people such as tech, business, media, and UI/UX.
 Effective coordinate tasks and schedules for all team members.

COLLABRATOR & TECH COORDINATOR - WEBSITE²

LockIn (aka. aSocial) | Toronto, ON | Jan 2024 - Current

- Prototype, develop & launch the LockIn App, a platform that rewards students for reducing phone usage and increasing productivity.
- Provide technical guidance and contribute to the development of the web and mobile products. Work closely on IOS APIs on Swift, Flutter for mobile app, and Next.js for website.

WORK & RESEARCH EXPERIENCE

CLOUD AND MOBILE APP DEVELOPER CO-OP

Johnson Controls | Concord, ON | May 2023 - June 2024

- Develop a Home Security/Community App using Flutter with firebase backend, providing real-time geolocation services using GCP API.
- Create API integration to facilitate communication between App and Google Matter Devices, HA Devices through a cloud database.
- Design intuitive UI with Figma and translate designs into Flutter App.

FELLOWSHIP AND PROJECT LEAD

UofT Hatchery | Toronto, ON | May 2024 - Sep 2024

- Represented Campus Eats in advancing the campus dining business concept to the go-to-market stage.
- Conducted Market research with over 50 restaurants and 500+ students. Developed a detailed business plan, cash flow analysis.
- Presented the Hatchery Dominant Pitch, and the Hult Prize's Pitch.
- Recognized by two courses at UofT, officially registered as company.

RESEARCH ASSISTANT - DBMS ACCELERATION - FDL WEBSITE³

Qizhen Zhang | Toronto, ON | Sep 2023 - Dec 2023

- Optimize performance of DBMS with accelerators (GPUs, FPGAs).
- Develop a unified abstraction hardware acceleration for DBMS.
- Build a network for scaling out data management accelerators.

SIDE SKILLS

- Hardware PC Assembling
- Networking DNS, Cloudflare
- Leadership Project lead, Team coordination, Team Management
- **Business** Market Research, Business Planning, Pitch
- Language English, Mandarin

LINK REFERENCE

- 1. Campus Eats Demo:
 - https://www.liustev6.ca/campusEats
- 2. LockIn Website:

https://tryasocial.com/

- 3. **Research FDL Website:** https://fardatalab.org/
- 4. Version one Personal Website:

https://my-personal-websiteyuanxyyds.vercel.app/

5. Sample Backend Request:

https://webserver.liustev6.ca/landsink/predict/9500/

- 6. StevCloud:
 - https://cloud.liustev6.ca/
- 7. **Data Science Projects Website:** https://yuanxyyds.github.io/Data-

Science-Projects/

8. **Great Lake Analysis Website:** https://yuanxyyds.github.io/Analyzi ng-Great-Lakes-Polution/

PERSONAL PROJECTS

PERSONAL WEBSITE DEVELOPING - LIUSTEV6.CA

Personal-Project | Toronto, ON | June 2023 - Current

- Launch and maintain my personal website, showcasing details on all my projects, with video demos and interactions.
- Implement Frontend with React JavaScript & Bootstrap; Backend with Django that is originally hosted on an AWS EC2 instance but later migrated to my own server.
- An Old version⁴ is implemented with Next.js and Tailwind CSS.

PERSONAL SERVER DEVELOPING

Personal-Project | Toronto, ON | Sep 2024 - Current

- Assemble my personal server from hardware components, including CPU, GPU, Motherboard, RAM, M.2 SSD, SATA HDD.
- Containerize LXC applications within Debian OS within Proxmox Host.
- Configure DNS & Network Tunnel in Cloudflare to secure the system.
- Host Django Web backend <u>Sample Request in Predict Land Sunk</u>⁵
- Integrate NextCloud to host my personal cloud service at <u>StevCloud</u>⁶
- Train Machine Learning Model using Food 101 Dataset to predict food types and calories based on the user input image.

DATA SCIENCE PROJECTS COLLECTION WEBSITE - LINK TO WEBSITE⁷

Personal-Project | Toronto, ON | June 2023 - Current

- Develop a Data Science Projects Showcasing website by Rmarkdown.
- Leverage Linear Regression model to predict NBA players' NBA2K ratings based on their regular-season statistics.
- NLP to assess Clash Royale players' sentiment toward game updates.
- Visualize when and where are most likely to be stolen in Toronto.
- Analyze Relationship on Life Expectation vs. Alcohol consumption.
- Analyze Phosphorus Pollution level in Great Lakes (<u>Link to Website</u>⁸)