Yoshiki Fujiwara

Full Stack Engineer with **Dev Lead** experience at **Microsoft**.

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TECHNICAL SKILLS

- Language: **Python**, **C#**, **C++**, C, **TypeScript**, JavaScript, **SQL**, HTML, CSS, OCaml, Assembly, Verilog
- PyTorch, FastAPI, Web Components, NextJS, Node, React, Pandas, UnitTest, NUnit, Jest, Playwright
- Basic Azure; Speech/OpenAI/ContainerApps/Functions/VM/SQL/CosmosDB, CI/CD, Git, Docker, Flutter, Vivado

EXPERIENCE

Software Engineer 2 at Microsoft

August 2021 - Present, Tokyo, Japan

- **Bing: Ads Revenue Improvement**
  - **Led** a team on revenue improvement initiatives to implement new ads annotations, increasing revenue. Leveraged **generative AI** and **web scraped** data to create and integrate new annotations into Bing Ads, enhancing the overall user experience. Employed a **Distributed System Backend** with **C#**, **Python**, **SQL**, and a **KV Store** for development.
  - Created and maintained a new coexistence scenario for 1st party ads alongside 3rd party ads, collaborating with a **cross-org team**. Implemented a robust backend using a **Distributed System Backend** with **C#**, and created a daily updated **machine learning pipeline** with **Python** and **SQL**.
- **Copilot: Volume Improvement**
  - **Led a cross-org team** for a new 2-3D model based interactive character experiences, resulting in increased engagement.
  - Implemented a voice system requiring deep knowledge of **Asynchronous Programming** and **Azure Speech Service**.
  - Designed and implemented character UIs with 2D-3D models, leveraging **Web Components** and **React** with **TypeScript**.
  - Developed and refined character personalities through advanced **prompt engineering** and **fine-tuning** techniques for the **Azure OpenAI model**, ensuring consistent and engaging interactions.
- **Microsoft News: Volume Improvement**
  - Developed and implemented cards on the Edge new tab page to enhance Microsoft News' daily active users. Utilized **Web Components** and **TypeScript** for frontend development, and **C#** and a **KV Store** for backend services.
  - Integrated user pathways within Microsoft Edge to direct traffic to Microsoft News, leveraging **C++**.

Research Assistant at the University of Tokyo

October 2018 - October 2021, paid part time, Tokyo, Japan

- **Deep Neural Network Acceleration**
  - Conducted research on Deep Neural Network accelerations, resulting in a paper accepted at a **top-tier conference**.
  - Developed and evaluated models using **PyTorch**, created simulators in **C++**, and designed accelerators with **Verilog**.
- **Cyber Security System**
  - Conducted research on cyber security system, resulting in a paper with **Best Paper Awards**.
  - Developed and managed virtualized networking systems using **Python** for infrastructure management and evaluation.
  - Established and led a course on various cyber attacks and their defense mechanisms. Organized and facilitated a cybersecurity event focused on control systems, attended by **35 government and industry professionals** from the Indo-Pacific region.

EDUCATION

The University of Tokyo

April 2021 - March 2023, Tokyo, Japan

Master in Computer Science, GPA: 4.0

The University of Tokyo

April 2017 - March 2021, Tokyo, Japan

Bachelor in Computer Science, GPA: 3.9

NOTABLE PUBLICATIONS

- "ASBNN: Acceleration of Bayesian Convolutional Neural Networks by Algorithm-hardware Co-design" Link
  Full paper accepted in Application-specific Systems, Architectures and Processors 2021, which is **one of the top conferences in the field of computer sciences**.
- Efficient Incident Response System on Shared Cyber Threat Information Using SDN and STIX Link
  Full paper accepted in IEEE International Conference on Computing 2021. This paper received **Best Paper Awards**.

PROJECTS

- My motto is "learn to code," which has enabled me to become a full stack engineer. Here are part of projects I've worked on and some of others are uploaded in my GitHub.
  Deep Learning Framework with Quantization Functionality, Open Sourced RISC-V Core, iOS/Android Gaming App