Yung-Ta, Lin (Lynda)

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Senior Frontend Engineer with 5+ years' experience building React/TypeScript applications, specializing in real-time collaboration, AI-assisted tools, and high-traffic consumer products (1B+ downloads). Skilled in HTML5 Canvas, WebSockets, React Query, and modern testing (Jest, Vitest), with a strong foundation in Human-Computer Interaction.

PROFESSIONAL EXPERIENCE

Optoma Corp.   **New Taipei City, TW**
Senior Frontend Engineer   *Nov. 2023-*

- Whiteboard (React App):
  - Built a real-time collaboration platform supporting 60+ concurrent users across 30-page infinite canvases.
  - Optimized rendering and export workflows, ensuring smooth performance at scale.
  - Implemented socket message debouncing with p-queue, improving stability in real-time sync.
  - Expanded unit test coverage to 99%, ensuring long-term reliability.
- Canvas Rendering Engine (TypeScript):
  - Improved text rendering and eraser algorithms for smoother, more precise editing.
  - Implemented pressure-sensitive pen support and refactored stationery tools (ruler, compass, etc.) for enhanced user experience.
  - Introduced AI-powered sticky notes to accelerate brainstorming workflows.
  - Enabled crash-free collaboration on tablets with 60+ PDFs by optimizing PDF rendering with a worker-pool and memory management strategy.
  - Resolved export failures on low-memory tablets by replacing `toDataURL` with `toBlob`, enabling reliable PDF/PNG export across devices.
- AI Companion (React App):
  - Spearheaded 0→1 development of an educational AI assistant.
  - Integrated LLM backends to deliver interactive chat, quizzes, and summaries.
  - Embedded seamlessly into an Android TV app via WebView.
  - Enforced unit testing and component-driven development for maintainability.
- Additional Contributions:
  - Improved performance and quality of legacy codebases.
  - Adopted AI tools (Copilot, Cursor, PR Agent) to accelerate development workflows.
  - Contributed to early LLM proof-of-concepts, helping shape product direction.
  - Researched competitor product Excalidraw and shared insights on socket design to improve team knowledge and system design discussions.
  - Collaborated with an outsourced development team, ensuring smooth communication, technical alignment, and successful product delivery.
  - Adopted Turborepo monorepo architecture to unify React app and Canvas library, enabling faster iteration and consistent dependency management.

Perfect, INC.   **New Taipei City, TW**
Frontend Engineer   *Mar. 2020–June 2022*

- Maintained and enhanced Cosmetic-Web, a single-page React/Redux application embedded in the YouCam app series (1B+ downloads worldwide).
- IImplemented monetization features and global UI improvements; conducted A/B tests to optimize engagement.
- Reduced front-end build size by 43% (320kB) through Webpack upgrade, code-splitting, library replacement, and dynamic language packs.

- Led group study sessions on performance metrics and security, promoting knowledge sharing within the department.

Phase Software GmbH   **Taipei, TW (Remote)**
Software Engineer II   *Jul. 2022–Jan. 2023*

- Delivered features and fixes for a motion graphics web app (React, Storybook, TailwindCSS); built the official website with Gatsby + Strapi (CMS, GraphQL).

Additional Experience
- GaussToys, Inc. - Game Developer (2017-2018) : Built Unity-based apps (iOS/macOS/Windows) and showcased at CES, Innovex and international conferences

EDUCATION

NATIONAL TAIWAN UNIVERSITY   **Taipei, TW**
Master of Computer Science and Information Engineering   *Aug. 2017*

- Concentration - Human Computer Interactions @ Communications and Multimedia Lab
- Master Thesis - "Outside-In: Visualizing Out-of-Sight Regions-of-Interest in a 360 Video Using Spatial Picture-in-Picture Previews"

NATIONAL TAIWAN UNIVERSITY   **Taipei, TW**
Bachelor of Computer Science and Information Engineering   *June. 2014*

- GPA - 3.95, Ranking - 20 / 128

PUBLICATIONS & PATENTS

Outside-In: Visualizing Out-of-Sight Regions-of-Interest in a 360 Video Using Spatial Picture-in-Picture Previews. [website] ACM UIST 2017

Shadow: One-dimensional Proactive Sensing for Enlarging Gesture-interaction Space [website]
AUI 2016 Honorable Mention, TAICHI 2016 Best Poster

US10990843B2: Method and electronic device for enhancing efficiency of searching for regions of interest in a virtual environment [website]

SKILL TREE

- **Languages & Frameworks:** JavaScript (ES6+), TypeScript, React.js, Redux
- **UI & Styling:** HTML5, CSS3, SCSS, TailwindCSS, Shadcn, Styled Components
- **Core Expertise:** HTML5 Canvas, WebSockets, React Query
- **Testing:** Jest, Vitest, Storybook
- **Build & Tools:** Webpack, Vite, Git, Jira, Figma, SonarQube
- **Other:** i18n, Lodash, Copilot, Cursor, PR Agent
- **Languages:** Mandarin (native), English (TOEFL 95/120)