

Karen Hao-Yi Tu

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EDUCATION

Carnegie Mellon University, Mountain View, CA

May 2023 (Expected)

Master of Science in Software Engineering

New York University, Tandon School of Engineering, Brooklyn, NY

July 2021

Preparatory Course for Graduate Studies in Computing

- Course topics include: Computer Programming in C++, Object Oriented Design, Discrete Math, Data Structures and Algorithms, Principles of Operating Systems, and Introduction to Computer Networks

University of California, Berkeley, Berkeley, CA

August 2018

Summer Session

Selected Coursework: CS160 User Interface Design and Development, Design Methodology

- Implemented five web applications using HTML, CSS, JavaScript, WebSocket, and Django.
- Awarded to one of the three design awards among 30 teams in the class of CS160 for a high-achieving design cycle.

National Taiwan Normal University, Taipei, Taiwan

January 2017

Bachelor of Arts, History, Cumulative GPA: 3.74/4.30

SKILLS

Programming Languages: Familiarity with WebDev Languages (HTML, CSS, JavaScript, jQuery), SQL, C++ (Basic)

Frameworks and Tools: React, Redux, RESTful API, Node.js, Unit Test (Jest), Git, Webpack

PROFESSIONAL EXPERIENCE

Trend Micro Inc.

Sr. Engineer

Taipei, Taiwan

June 2019—August 2021

- Developed Trend Micro Activation Service and credit-based licensing service UIs using React and Redux to help 7,000+ business customers activate and track the usage of their solutions.
- Migrated from multi-page to single-page web app which boosted the activation success rate by 120% in 4 months.
- Launched an internal User Behavior Report dashboard which enabled executives and analytics team to make data-driven decisions on licensing business saved the manual time of work over 60%.
- Designed, implemented, tested, and maintained the platform with features of big data visualization and role-based access control (RBAC) to advance Europe and North America sales teams' regional channel business.
- Ensured efficient user experience through paging loading and cache reduced the time of first contentful paint by 50%.
- Completed unit tests in Jest and React Testing Library ensured up to 100% coverage for new modules.
- Won 2nd place among 90 teams and 1,500 employees in an internal Customer Success and DevOps contest.
- Won 1st place among 20 teams in the Information System (IS) DevOps Camp.

AppWorks School

Web Class Trainee

Taipei, Taiwan

January 2019—June 2019

- Selected as one of 9 trainees from 400+ applications for the non-CS background based on programming potential.
- Implemented four assigned and personal web apps which integrated with third-party payment service and Web Storage API using VanillaJS, React, and Redux in 75 to 80 hours per week of individual project-based training.
- Built real-time customer support service UI via WebSocket with Backend trainees under the Scrum development.

PROJECTS

Front-End Engineer, Homie — Web Application Project

March 2019

- Developed housework management app with features of OAuth login, account, and task management CRUD operation via React and Firebase.
- Visualized the task-rewarding system by plotting bar charts using D3.js to drive users with initiatives.

UI Designer / Web Developer, NS WATCHER — Mobile Application Project

February 2018

- Led design for 5,000+ downloads and 4.9/5.0 rated game price comparison Android application (NS Watcher) to help users figure out the best deals.
- Developed delightful and effective interaction through VanillaJS to build an introduction website for potential users.