Karen Hao-Yi Tu

<u>haoyit@andrew.cmu.edu</u> ♦ (346) 368-4758 <u>linkedin.com/in/karenhytu</u> ♦ <u>karenhaoyitu.com</u> ♦ <u>github.com/haoyt5</u>

EDUCATION

Carnegie Mellon University, Mountain View, CA

January 2022—May 2023 (Expected)

Master of Science in Software Engineering

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

January 2021 - 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

May 2018-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 Bachelor of Arts, History, Cumulative GPA: 3.74/4.30

September 2012—January 2017

SKILLS

Programming Languages: Familiarity with WebDev Languages (HTML, CSS, JavaScript, jQuery) **Frameworks and Tools**: React, Redux, RESTful API, Node.js, Unit Test (Jest), Git, Webpack

PROFESSIONAL EXPERIENCE

Trend Micro Inc.

Taipei, Taiwan

Sr. Engineer

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 and implemented a platform with features of data visualization and role-based access control (RBAC) to advance EU and NABU teams' channel business targeted on customers whose potential is 3.49 times higher.
- 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 SchoolWeb 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.

San Francisco, CA <u>karenhaoyitu@gmail.com</u> (650) 360-5795

Karen Hao-Yi Tu

linkedin.com/in/karenhytu karenhaoyitu.com github.com/haoyt5

Education Carnegie Mellon University

Master of Science, Software Engineering

Mountain View, CA May 2023 (Expected)

New York University, Tandon School of Engineering

Preparatory Course for Graduate Studies in Computing

Brooklyn, NY July 2021

• 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

Summer Session

Berkeley, CA August 2018

- Selected Relevant Coursework: CS160 User Interface Design and Development, Design Methodology
- Received one of the three design awards among 30 teams in the CS160 class for a high-achieving design cycle.

National Taiwan Normal University

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

Taipei, Taiwan *January 2017*

Professional Experience

Trend Micro Inc.

Sr. Engineer

Taipei, Taiwan June 2019 to August 2021

- Developed Trend Micro Activation Service and credit-based licensing service UIs for 7,000+ worldwide customers to activate and track usage of the solutions.
- Implemented the reformed Activation Service which boosts the activation success rate up to 130% in 4 months.
- Launched an internal User Behavior Report Center which improved data-driven decisions for the global licensing business executives and managers.
- Designed, implemented, tested, and maintained the platform in React/Redux to advance Europe and North America sales teams' channel business.
- Completed unit tests in Jest and React Testing Library ensured up to 100% coverage for new modules.
- Ensured effective and efficient UX through paging loading and cache that reduced first contentful paint by 50%.
- 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 to June 2019*

- Selected as one of 9 trainees from 400+ applications for the non-CS background based on programming potential.
- Built four assigned and personal web apps in VanillaJS and React/Redux independently in 75 to 80 hours per week of project-based training.

Projects

Homie - Web Application Project

Front-End Engineer

Taipei, Taiwan March 2019

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

NS Watcher - Mobile Application Project

Web Developer / UI Designer

Taipei, Taiwan 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 effective interaction through VanillaJS to build an introduction website for potential users.

Skills

Programming Languages: WebDev Languages (HTML, CSS, JavaScript, jQuery), SQL, C++ **Frameworks and Tools:** React, Redux, Unit Test (Jest), RESTful API, Node.js, Git, Webpack