Karen Hao-Yi Tu

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Education

Carnegie Mellon University, Mountain View, CA   *January 2022 – May 2023 (Expected)*
Master of Science in Software Engineering
- Selected Coursework: Foundations of Software Engineering, Software Verification and Testing.

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
- 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   *September 2012 – January 2017*
Bachelor of Arts, History, Cumulative GPA: 3.74/4.30

Skills

Programming Languauges: Familiarity with WebDev Languages (HTML, CSS, JavaScript, jQuery), SQL
Frameworks and Tools: React, Redux, RESTful API, Node.js, Unit Test (Jest), Git, Webpack, L10n

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 School   Taipei, Taiwan
Trainee   *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 agile development (SCRUM).

Projects

Full Stack Engineer, FSEChat – Web Application Project   *January 2022*
- Developed interactive real-time chat app with features of sign-in, sign-up, chat posting, receiving, and history message viewing utilizing HTML, CSS, JSON, JavaScript, Express, joi, socket.io, and MYSQL.
- Implemented the user authentication and messaging RESTful services based on Object-Oriented Programming and Model-View-Controller (MVC) architecture.

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.