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WORK EXPERIENCE & INTERNSHIP

Shopee, Software Engineer (Mobile Apps)   Jul 2024 - Present
- Develop and maintain User Account features for the Shopee Mobile App on both **iOS** and **Android** using **TypeScript** and **React Native (RN)**.
- Leverage tools such as **Redux**, **React Query**, **ESLint**, **Husky**, and **GitLab Actions** to ensure efficient and clean code development, integration, and **CI/CD** pipelines.
- **Played a key role in a business cost-saving initiative** – developed new features that reduced per-user usage costs by **200%-300%**. This contribution resulted in **weekly savings of a five-figure USD amount**, directly benefiting the company's bottom line.
- Collaborate with iOS and Android native teams to implement features requiring platform native SDKs, including utilizing the **RN Native Bridge**, i.e sim card installation and network status checks.
- Work closely with Backend Engineers to design and implement **RESTful APIs** to ensure smooth data flow and synchronization for app features.
- Actively involved in the end-to-end development process, from project feasibility and design to development, testing, and deployment, ensuring timely and accurate delivery as per business requirements and project timelines.
- Support QA, UAT, and Regression testing, ensuring that features meet the highest standards of quality and function correctly across different platforms.
- Communicate effectively with cross-functional teams, including Product Managers, to bridge technical and non-technical gaps.

Singtel, Software Engineer (Mobile Apps)   Jul 2023 – Jun 2024
- Conducted comprehensive market research on mobile payment experiences in competitor apps.
- Leveraged **FullStory** data analytics in understanding user behaviors, facilitating data-driven design decisions aimed at enhancing user experiences and optimizing product performance.
- Developed hi-fidelity wireframes using **Figma** for stakeholders' visualization.
- Innovated and implemented an **AI-driven solution**, comprising an Instantaneous Intent Detection Network and Multiple-Choice Knapsack Problem (IIDN-MCKP) **deep learning** model. Leveraged cutting-edge techniques such as **LSTM** and **Attention Mechanism**, integrated the model into My Singtel App as **Proof-of-Concept (POC)**, thereby showcasing the potential for enhanced user engagement and conversion rates.
- Collaborated closely with stakeholders including product owners and designers to ensure alignment with overarching business objectives, delivering high-performance, and bug-free code.
- Utilized a robust technology stack, including **React Native**, **Redux Toolkit**, **Redux Saga**, **JavaScript**, **TypeScript**, and **Jest Testing**, to develop and implement frontend features for My Singtel App.
- Embraced Agile methodology, and leveraged tools such as **Jira**, **Confluence**, **Bamboo** and **Bitbucket** for efficient development practices and seamless collaboration.
- Presented various solutions and POCs to key stakeholders, including VPs of digital Technology; Digitalization, Products & Partnership; Consumer & Business IT.

Singtel, Management Associate   Jul 2023 – Jun 2024
- Orchestrated and led a proficient team of 5 individuals in organizing departmental townhall events.
- Coordinated event logistics in conjunction with floor managers, internal and external vendors throughout planning and execution phases.
- Managed technical aspects of the events, including AV setups and presentations.
- Facilitated pre-event coordination with the Senior Leadership Team (SLT) and award recipients.
- Demonstrated interpersonal and communication skills in fostering effective collaboration among team members and cultivating strong relationships with key stakeholders.
- Conceptualized and designed a **distinctive Business Unit lanyard** exclusive to the department, symbolizing a new era and reinforcing a sense of identity following a strategic shift in business focus.

- Achieved significant participant engagement, with a total attendance of **550 individuals**, and consistently garnered a post-event satisfaction score averaging **90%**.

Creative Technology, <u>Software Engineer Intern</u>　　　　　　　　　　　　　　Jan 2022 – May 2022
- Wrote quality code for UI, application logic and services for Windows app platform.
- Build application menu in Windows system tray for controlling audio products and provide greater convenience to users.
- Utilized **Windows Presentation Foundation** (WPF) with **C#**, **XAML** and **MVVM** design pattern to improve existing features for consumer products (e.g. headphones, speakers, sound cards, sound blasters).
- Implemented unit testing scripts to verify user-intended behavior of new and existing features within the Creative App.

Qisda Corporation, <u>Testing Engineer</u>　　　　　　　　　　　　　　　　　Feb 2020 - Apr 2020
- Tested display monitor prototypes based on different test cases with Dell platforms that were supported by Windows OS.
- Identified and computed technical issues (e.g. bugs) in Excel sheets and resolved issues upon seeking clarification from superior.
- Honed analytical and critical thinking skills in problem-solving (e.g. technical troubleshooting) other than effective team communication and collaboration.

EDUCATION

Nanyang Technological University (NTU)　　　　　　　　　　　　　　　　Aug 2020 - Jun 2023
School of Electrical and Electronic Engineering
- **Bachelor of Engineering (Information Engineering and Media)**
- **<u>Honours (Highest Distinction)</u>**; CGPA: 4.98 / 5.0
- **NTU Scholar & Lee Kuan Yew's Gold Medalist**

Virtual Training and Development
- Udemy Relevant Modules: (1) The Complete iOS and Swift App Development Bootcamp (2) Web Development Bootcamp (3) JavaScript Algorithms and Data Structures (4) Windows Presentation Foundation Masterclass (5) React and React Native (Hooks, Router, Redux)

Ngee Ann Polytechnic (NP)　　　　　　　　　　　　　　　　　　　　Apr 2014 – May 2017
School of Electrical and Electronic Engineering
- **Diploma (Merit) in Audio Visual Technology**; GPA: 3.98 / 4.00
- **Director's List**
- **Gold Medalist**
- **IES Gold Medal Awardee for Most Outstanding Academic Performance**
- **Diploma Plus: Advanced Engineering Mathematics**

ACADEMIC PROJECTS / MODULE PROJECTS

NTU Final Year Project: **Social Media App for Foodie and F&B Businesses**　　　Aug 2022 - May 2023
- Designed and developed a social media platform for users to share their food pictures to increase awareness and opportunities to help Food & Beverage businesses in post-pandemic.
- Built the iOS app with **SwiftUI**, **XCode** and **Firebase**.
- Implemented and integrated **Convolutional Neural Network** for image recognition feature using **Python** and **TensorFlow**.

NTU Design and Innovation Project: **Roommate Mobile App** (Team of 10)　　　Aug 2021 - Nov 2021
- Utilized **Figma** to design and implement user interface and experience prototypes.
- Deployed **React Native** framework and **JavaScript** to develop frontend.
- Applied **Git** and **GitHub** for version control.

- Researched and integrated API services and 3rd party libraries.
- Initiated and managed project schedule and assignment of tasks to team members
- Project code: https://github.com/JiXiangChua/Cohab

NTU Introduction to Design and Innovation Project: **Mobile (Android)**   Mar 2021 - Apr 2021
- Integrated web application and android mobile app to produce online quiz system for teachers and students.
- Developed using **Java** and **XML** for interface design and exposed to **Android Studio SDK**.
- Used **CSS** and **Bootstrap** to design UI for web application and built a student ranking system.

NTU Introduction to Design and Innovation Project: **E-shop Webapp** (Team of 2)   Feb 2021 - Mar 2021
- Oversaw project's planning, development and scheduling with timely delivery.
- Deployed **MySQL** to implement webapp's database for storing name, size and quality of shoe products, user's account details, cart items and purchase orders.
- Used **HTML**, **CSS** and **Bootstrap** to modify webapp's frontend and **Java Servlet Programming**, **JDBC** and **Apache Tomcat** for back-end.

OVERSEAS EXCHANGE PROGRAMME

Yonsei University, South Korea   Jun 2022 – Aug 2022
- Module Accomplishment: Introduction to Computer Graphics
- Honed cross-cultural knowledge by embracing individual differences with respect to different values, traditions, norms, beliefs and practices.
- Recognized the importance of diversity due to knowledge transferring and sharing that spark creativity.
- Designed a series of postcards for final project with **Adobe Photoshop**, **Illustrator** and **InDesign**

CO-CURRICULAR ACTIVITIES / LEADERSHIP

DSTA BrainHack 2022 Hackathon   Jul 2022
- Worked in a team of 5 to develop a mobile app solution for NSMen to better manage work and play
- Developed the software using React Native

Shopee Code League   Apr 2022

DSTA BrainHack 2021 Hackathon   Jun 2021
- Worked in a team of 4 to develop a mobile app solution for Singaporeans to better adjust and adapt into the new norms in a post-Covid world
- Developed the software using React Native

Tchoukball   Apr 2014 - Feb 2017
- **Club President** (2016 - 2017)
- **Club Vice-President** (2015 - 2016)
- Managed overall Main Committee
- **Led** club events and camps planning and execution
- Assumed role as School Representative at POL-ITE Competitions

SKILLS

- **Languages**: Fluent in English and Chinese (Mandarin)
- **Software Programming**: JavaScript, TypeScript, Java, HTML, CSS, React, React Native, Swift, SwiftUI, Git and GitHub, Python
- **Software Applications**: Visual Studio Code, XCode, Visual Studio 2019, DAW Software (Logic Pro, Pro Tools), Adobe (Premiere Pro, Lightroom, Photoshop, Illustrator, InDesign), AutoCAD, Microsoft Office 2021 (Word, PowerPoint, Excel)
- **License**: Driving License Class 3