

DE JONG YEONG (DJ)

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LinkedIn: [linkedin.com/in/de-jong-yeong](https://www.linkedin.com/in/de-jong-yeong) | GitHub: github.com/dejongyeong | Portfolio: <https://www.dejongyeong.com/>

SKILLS & TECHNOLOGIES

Intermediate: Python • Version Control • HTML5 • CSS3 • Oracle SQL / MySQL • ReactJS

Exposure: TypeScript • JavaScript • Material UI • Bootstrap 4 • PHP Laravel • Circle CI • Heroku • C# • ROS • C++ • SCSS • MongoDB • Java

Software Tools & Platform: Trello • Slack • PyCharm IDE • IntelliJ IDEA • Figma • VS Code • Visual Studio

Personal Skills: Time Management • Teamwork • Communication • Self-Motivation • Well Structured • Problem Solving • Attention to Detail • Logical • Analytical • Open-mindedness • Creative • Curious

Languages: Chinese • English • Cantonese • Malaysian Malay

PROFESSIONAL EXPERIENCE

Postgraduate Researcher • Full Stack Engineer | IMaR Technology Gateway

2022 - Present

- Research relevant technologies and collaborate with in-house engineers to develop a monitoring application for next-generation smart connected agricultural machines.
- Oversee the software workflow and maintain time-series databases for data communication.
- Prototype applications with **NextJS**, **LeafletJS**, **Shadcn/ui**, **AntD Charts**, **InfluxDB** and **Supabase**, facilitating dynamic user experience and data visualization.
- Craft insightful reports and deliver weekly updates to stakeholders, foster transparent communication and facilitate timely project deliveries.
- Contribute ideas and develop applications in events such as Open Day and Kerry Science Festival, achieving a 30% increase in user participation.

Full Stack Developer (Part-Time) | IMaR Technology Gateway

2020 - 2021

- Researched relevant technologies to develop web and mobile applications for stakeholders.
- Developed RESTful API services with **PHP Laravel 8.0** framework and **MySQL** database.
- Prototyped web and mobile applications with **ReactJS**, **React Native**, **LeafletJS**, and **Bootstrap 4**.
- Adhered to best practices for version control, utilising **Git/GitHub**.

Graduate Student Intern | IMaR Technology Gateway

2019

- Programmed a GUI and automated crane metrics analysis per hour using **Python**, offering ease-of-use for industrial partner - Liebherr Container Cranes Ltd.
- Documented technical workflows and knowledge in private wiki for education of newly hired employees.
- Authored code fixes and enhancements for inclusion in future code release and patches.
- Led version control efforts within our team, employing **Git/GitHub**.

EDUCATION

Master by Research in Engineering | Munster Technological University, Kerry

2022

Thesis title: *Development of Multi-Sensor Fusion Perception Systems for Obstacle Detection in Container Terminals.*

- Liaised with colleagues within the organization to design and construct necessary components to ensure successful project deliveries.
- Obtained satisfactory feedback from supervisors and industrial partners following the preparation and presentation of monthly progress reports.
- Conducted research review on sensor and sensor fusion technology in autonomous vehicles that could be applied to next-generation cranes, leading to a publication in the MDPI Sensors Journal (IF: 3.576) with over 14,000 full-text views and 20 citations to date.
- **Tech: Python, (exposure): ROS, C++**

B.Sc. (Hons) in Computing with Software Development, 1:1 | Institute of Technology, Tralee

2015 - 2019

Thesis title: *Sentiment Analysis Approach for Brand Reputation Evaluation.*

Relevant Projects:

- Employed **ARIMA** model to predict and forecast on global climate datasets from Kaggle using **Python**.

- Demonstrated a fully automated [CI/CD](#) pipelines with **GitHub**, **Travis CI**, **Heroku**, and **GCP**.

PERSONAL PROJECTS

Covid 19 Tracker Application | <https://covid-19-tracker-apps.herokuapp.com/>

2021

- **Tech:** ReactJS, ChartJS, React Simple Maps, CircleCI, Heroku, ESLint, Material UI, Styled Components.
- Visualizes the global and country-specific total confirmed, recovered, and deceased cases retrieved from Open Disease Data API.

Online Portfolio V1 | <https://dejongyeong.github.io/web-portfolio/>

2020

- **Tech:** ReactJS, EmailJS, GitHub Actions, Material UI, Figma.
- Showcases projects and professional experiences – a digital version of curriculum vitae.

PUBLICATIONS & PRESENTATIONS

Karakuni, S., Barry, J., **Yeong, D. J.**, & Walsh, J. (**In Press**). Data Pre-Processing Methods to Enable Operational Metrics Calculations for Heavy Machinery.

Yeong, D. J., Barry, J., & Walsh, J. (**2021**). Sensor and Sensor Fusion Technology in Autonomous Vehicles: A Review. MDPI Sensors Journal. DOI: 10.3390/s21062140

Velasco-Hernandez, G., **Yeong, D. J.**, Barry, J., & Walsh, J. (**2020**). Autonomous Driving Architectures, Perception, and Data Fusion: A review. Cluj-Napoca: IEEE. DOI: 10.1109/ICCP51029.2020.9266268

Yeong, D. J., Barry, J., & Walsh, J. (**2020**). A Review of Multi-Sensor Fusion System for Large Heavy Vehicles Off Road in Industrial Environments. Presented online at the 31st Irish Signals and Systems Conference. Letterkenny: IEEE. DOI: 10.1109/ISSC49989.2020.9180186.

VOLUNTEERING EXPERIENCES

Workshop Instructor | Kerry Science Festival @ Munster Technological University

8th & 9th Nov 2021

- Delivered “Let’s code with Scratch” online workshop with William O’ Connor (colleague) to 34 primary students via Microsoft Teams.

Facilitator | Institute of Technology, Tralee

9th Dec 2019

- Facilitated a group of 7-10 students in a discussion about climate change and technologies in Causeway Comprehensive School, as part of the Access21@ITTralee.

Student Volunteer | MegaDojo @ Institute of Technology, Tralee

13th Oct 2018

- Mentored a group of 9 students from age 7-17 in intermediate web design using **HTML**, **CSS**, and **JavaScript**, led by an experienced leader.

ONLINE COURSES, CERTIFICATIONS & ACHIEVEMENTS

- Introduction to 3D Deep Learning with PyTorch @ Think Autonomous AI by Jeremy Cohen (*on-going*).
- Research Integrity: Concise (core course) Certificate, Epigeum, 30 March 2020.
- Microsoft Office Specialist 2010, Microsoft & Certiport, 2013.
- Computer Skills Certificate, UNSW Global & RE2 International Computer School, 2011.

INTERESTS, HOBBIES & ACTIVITIES

- Interested in web or mobile applications development and artificial intelligence.
- Playing chess – great way to unwind, destress, and keep the mind sharp.
- Gaming – great way to boost teamwork and destress.
- Served as a president of Bowling Club in 2013/14 in SMJK Sam Tet, Malaysia.