# DE JONG YEONG (DJ)

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LinkedIn: linkedin.com/in/de-jong-yeong | GitHub: github.com/dejongyeong | Portfolio: dejongyeong.github.io/web-portfolio/

# **SKILLS & TECHNOLOGIES**

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

Exposure: Java ● JavaScript ● Material UI ● Bootstrap 4 ● PHP Laravel ● Travis CI ● Circle CI ● Heroku ● C# ● ROS

Framework • C++ • SCSS • MongoDB

Software Tools & Platform: Trello • Slack • PyCharm IDE • IntelliJ IDEA • Photoshop CS5 • 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

Languages: Chinese ● English ● Cantonese ● Malaysian Malay

#### **EDUCATION**

### Master by Research in Engineering | Munster Technological University, Kerry

2019 - Apr 2022

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

- Awarded research scholarship funding, supported, in part, by Science Foundation Ireland grant 13/RC/2094.
- Liaises with colleagues within the organization to design and construct necessary components to ensure successful project deliveries.
- Obtains satisfactory feedback from supervisors and industrial partners following the preparation and presentation of monthly progress reports.
- Conducted research on sensor and sensor fusion technology in autonomous vehicles, leading to a publication in the MDPI Sensors Journal (IF: 3.576) with more than 14,000 full-text views and 20 citations to date.
- Developed a synchronization system using Python Scapy, Python datetime and ROS Approximate Synchronizer to synchronize the sensor messages, achieving an average of 82.14% of the 153 sensor messages having a difference of less than 50 milliseconds.

B.Sc. (Hons) in Computing with Software Development, 1:1 | Institute of Technology, Tralee **Thesis title:** <u>Sentiment Analysis</u> Approach for Brand Reputation Evaluation.

2015 - 2019

#### **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.

#### **PROFESSIONAL EXPERIENCE**

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

Dec 2020 - May 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**.
- Formulated weekly progress reports for stakeholders and addressed the identified high-priority requirements to ensure successful project deliveries.

#### **Graduate Student Intern | IMaR Technology Gateway**

June - Oct 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.
- Contributed ideas and suggestions in team meetings and delivered updates on deadlines, designs, and enhancements.
- Led version control efforts within our team, employing **Git/GitHub**.

Web Developer Intern | StoryStock (Start-up)

Jan - Apr 2018

**Blog:** yeongdejongworkplacement.wordpress.com

- Designed, developed, and implemented new features based on analysed requirements using **PHP Laravel 5** framework, **MySQL**, **JavaScript**, **HTML5**, **CSS3**, and **Bootstrap 4**.
- Conducted informal cognitive walkthrough and improved UX on StoryStock platform.
- Adhered to best practices for version control, employing Git/GitHub.
- Worked with CEO, Head of Story Department and Senior Developer to determine organizational need, designing pages to meet demand.

#### **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. <u>Presented</u> online at the 31<sup>st</sup> Irish Signals and Systems Conference. Letterkenny: IEEE. **DOI:** 10.1109/ISSC49989.2020.9180186.

#### **SIDE PROJECTS**

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

2021

- Tech: ReactJS, ChartJS, React Simple Maps, CircleCl, 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.

# **VOLUNTEERING EXPERIENCES**

Workshop Instructor | Kerry Science Festival @ Munster Technological University

8<sup>th</sup> & 9<sup>th</sup> 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

9<sup>th</sup> 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

13<sup>th</sup> 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.

# **ACHIEVEMENTS, CERTIFICATIONS & ONLINE COURSES**

- 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.
- Introduction to 3D Deep Learning @ Think Autonomous AI by Jeremy Cohen (on-going).

# **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.