## Profile

## Proficiencies

- C/C<sub>++</sub>, Python, Javascript, Swift/SwiftUI
- MacOS/iOS/Linux/Windows Development
- Agile Methodology, Research & Development
- Mentoring, Programme Design, Technical Writing

## Expertise

- Software Architecture/System Design
- Computer Graphics/Computer Vision
- Artificial Intelligence/Machine Learning
- UI/UX/Information Visualization

# Professional Experience

## Deputy Lead

- Co-led research direction and objectives for R&D projects
  - Applied AI for Visual inspection
  - Applied AI for Subsurface Data applications
- Developed and deployed software solutions
  - Drone photo processing and automation applications (SwiftUI)
  - Dream Labs; a Technology Preview platform (ReactJS)
  - Parallel LOD Generation for GPR Data Visualization (AWS & Python & C++)

## SW. Engineer (CV/ML),

Screening Eagle Technologies - R&D (Dec 2020 - Dec 2022)

Screening Eagle Technologies - R&D (Jan 2023 - Present)

- $\bullet\,$  Researched and developed software prototypes
  - iPad LiDAR 3D scanning (Swift & C<sub>++</sub>)
  - 3D Asset viewing and annotation (ReactJS)
  - Boston Dynamics Spot control stack (Python & ReactJS)
  - Data collection and cleaning pipelines (Python)
  - Visual inspection processing applications (Python & Swift)

# Sr. SW. Engineer, Technical & Engineering Practices Lead

Autodesk - Delivery (Jun 2018 - Dec 2020)

Create things, Bless people, Give insight

- Champion for SWD & CI/CD Best Practices
- Architected & implemented Install Coordinator (C<sub>++</sub>)
- Architected & implemented Unit Test (GTest) and Component Test frameworks (Robot)
- Contributed to Install UI and UI workflows (Electron & ReactJS)

#### SW. Engineer

Autodesk - Memento/ReCap Photo (Jan 2015 - Jun 2018)

- Designed & implemented a CI/CD framework for Jenkins Pipeline Shared Library (Python)
- Architected & refactored UI framework and 3D manipulation tools (C<sub>++</sub>)
- Collaborated with UX to build UI workflows for Desktop and VR (C<sub>++</sub> & QT)

# Volunteer Experience

# Elder Geek/Head of Projects

GeeksHacking Community (Jun 2019 - Present)

- Head of Projects for GeeksHacking Software Projects
- Co-created and conducted alumni training & engagement programme for SST
- Program 2IC for Hackomania 2024 & 2025

## Mentor/Trainer/Ministry Lead

The Navteens Singapore (Dec 2009 - Present)

- $\bullet\,$  Developed Training Syllabus for Disciple-making Leadershipi
- Mentored individuals for holistic growth in faith and life

### Volunteer/Officer

Boys Brigade Singapore (Jan 2005 - Apr 2019)

# Education

M.Comp in C.S.

B.Sc in C.S. in R.T.I.S (Minor in Mathematics)

National University of Singapore (Jan 2017 - Jul 2019) DigiPen Institute of Technology (Sep 2012 - Aug 2015)