

Profile

Create systems, Bless people, Seek truth

Proficiencies

- C/C++, Python, Javascript, Swift/SwiftUI
- MacOS/Linux/iOS Development
- Rapid Prototyping, 0-1 Product Development
- Mentoring, Programme Design, Technical Writing
- AI-Assisted Development, Agentic AI

Expertise

- Software Architecture/System Design
- Computer Graphics/Computer Vision
- AI/ML, GenAI Engineering
- UI/UX/Information Visualization

Professional Experience

CV/ML Engineer, Deputy Lead

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

- Technical Lead for GPR Insights and AI/ML
 - Authored SWD & CI/CD Best Practices, adopted across 3 Product Engineering teams
 - Diagnosed and remediated key processes and technical issues, reducing churn by 50%
 - Led team from crisis mode to stable 2-month release cadence
- Co-led research direction and objectives for R&D projects
 - GenAI and CV/ML for Visual inspection
 - CV/ML for Subsurface Data applications
 - Pioneered AI-assisted development workflows and best practices for R&D
- Developed and deployed R&D software solutions
 - Drone photo processing and automation applications (SwiftUI)
 - Dream Labs; a Technology Preview platform (ReactJS)
 - Parallel LOD Generation for GPR Data Streaming (AWS & Python & C++)
- Researched and developed software prototypes
 - iPad LiDAR 3D scanning (Swift & C++)
 - Boston Dynamics Spot control stack (Python & ReactJS)
 - Data collection and cleaning pipelines (Python)

Sr. SW. Engineer, Technical & Engineering Practices Lead

Autodesk - Delivery (Jun 2018 - Dec 2020)

- Champion for SWD & CI/CD Best Practices
- Architected & implemented Install Coordinator (C++)
- 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++)
- Collaborated with UX to build UI workflows for Desktop and VR (C++ & 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)

- Developed Training Syllabus for Disciple-making Leadership
- Mentored individuals for holistic growth in faith and life

Volunteer/Officer

Boys Brigade Singapore (Jan 2005 - Apr 2019)

Education

M.Comp in C.S.

National University of Singapore (Jan 2017 - Jul 2019)

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

DigiPen Institute of Technology (Sep 2012 - Aug 2015)