Hail (Ian) Lim

US ianlim.dev@gmail.com 517 420 4348 Hail (Ian) Lim

Education

Michigan State University *Aug 2021 – May 2025*
BS in Computer Science

- GPA: 3.2/4.0
- **Coursework:** Discrete Structures, Probability and Statistics Engineering, Computer Systems, Software Designs(Object Oriental Programming), Mobile App Development(Android Studio), Database Systems, Algorithm Engineering, Intro to Machine Learning, Web App Architecture and Development, Collaborative Design(Capstone)

Seattle Central College *Jan 2020 – Aug 2021*
Undergraduate

- GPA: 3.5/4.0

Experience

Social Service Worker *Seongnam-si, South Korea*
Seongnam Hanmaeum Social Welfare Center *Apr 2017 – Dec 2018*

- Completed mandatory national service by working at a local social welfare center.
- Assisted in hydrotherapy sessions for infants with physical disabilities, supporting their muscle relaxation and mobility development in water-based activities.
- Collaborated with supervisors to improve the facility's efficiency and overall care environment.

Mortar Fire Direction Specialist *Gangwon-do, South Korea*
Republic of Korea Army *Aug 2016 – Apr 2017*

- Served as a Mortar Fire Direction Specialist.
- Calculated firing data for 81mm mortars, including azimuth, elevation, and charge, based on target coordinates.
- Worked under high-pressure conditions requiring accuracy, discipline, and teamwork.

Projects

Scheduling Tool Webpage *East Lansing, MI*
Michigan State University *Jan 2025 – May 2025*

- Project Webpage Link
- Scheduling platform that allows users to create events and collaboratively indicate their availability using a grid-based calendar interface.
- As more users mark themselves as available for a time slot, the color intensity of that slot increases—visually highlighting periods of overlap. The platform is commonly used to identify the best meeting time for a group.

Optimizing YOLOv5 for Wildlife Monitoring in Namibia *East Lansing, MI*
Michigan State University *Jan 2025 – May 2025*

- Final Paper (PDF) Link
- Wildlife Object Detection Optimization: Optimized YOLOv5n and YOLOv5m models for wildlife monitoring on a 65K+ image camera trap dataset from Namibia Desert Lion Conservation (46 species).
- Advanced Model Fine-tuning: Employed extensive data augmentation (HSV shifts, Mosaic, Mixup), addressed class imbalance with weighting, and corrected species-detection mapping errors to enhance model accuracy.
- Significant Performance Gains: Achieved 74.6% precision (up from 38.3%), 56.7% recall (up from 26.9%), and 60.6% mAP@0.5 (up from 24.9%) through Distributed Data Parallel training on a multi-GPU cluster.

Robotic Job Coaching Project *East Lansing, MI*
Michigan State University *Jan 2025 – May 2025*

- Project Video Link
- Video conferencing app between Peckham clients and job coaches (IOS, Android apps and Remote control of robotic arm).
- Flask Server for user management.
- Admin webpage for server management and robotic arm geofencing.

Technical Skills

Languages: C++, Python, Java, Swift, HTML/CSS

Frameworks: Flask, Node.js

Developer Tools: Git/GitHub, Docker, Google Cloud Platform, VS Code, Visual Studio, IntelliJ