

# LAWRENCE KEVIN

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Software Engineer with experience in Machine Learning, Networking, Applications Development and full-stack development with enthusiasm in cryptography and network security.

## PROFESSIONAL EXPERIENCE

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**Machine Learning R&D Engineer Intern** — DSO National Laboratories, Singapore [Aug 2022] — [Dec 2022]

- Researched on **cutting-edge** RL model paradigms such as Fully Observable Markov Decision Process (FOMDP) (Q-Learning, SARSA), POMDPs (Deep Recurrent Q- Learning Process) and other models (Multiagent MDPs and Dynamic State MDPs) for the purpose of overcoming jamming in the **context of battlefield communications**.
- Accomplished **faster and better** training accuracy, up to **30% more accurate** compared to conventional statistical modeling methods using FOMDP (Deep Q-Learning) models

## PROJECTS

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### PyTorrent – BitTorrent Client Recreation

- **Peer-to-peer networking** application created to download .torrent files
- **Led a team of 4**, Implemented **3+ features** such as leeching, multi-threading, hash checksum, via HTTP requests for **safe downloading**. Developed in **C** and **Python**.

### TeacherSpace - <https://github.com/Vemrthiss/TeachersSpace>

- A Teacher Privacy cum Scheduler Application intended to provide uninterrupted off-work hours.
- **Collaborated in a team of 5** and **Implemented 3+ features** such as queue **noSQL FireBase database** to handle student bookings with in-built calendar, **log-in system** and **in-built messaging system** using **Java**

### Hotel Booking Web System - [https://github.com/klken26/final\\_ESC\\_project](https://github.com/klken26/final_ESC_project)

- **led a team of 4** to **deploy feature-packed booking system** with **5+ features** such as search with API Query, search filtering, text input recognition, in-built map viewing, form check-out submission
- Web-app uses **noSQL Firebase storage** to handle credit card information safely
- Created using **ReactJS, MongoDB, HTML & CSS**.

## EDUCATION

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Singapore University of Technology & Design (SUTD) - Singapore

[2020] - [2024]

### Bachelor's of Engineering

- **Computer Science & Design** - Bachelor's Degree in Engineering, Concentrations:
- **Cybersecurity** Specialisation Track
- Minor in **Artificial Intelligence**, Minor in **Digital Humanities**

## SKILLS

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Skills: Proficient with JavaScript, Python, Tensorflow & Keras, Pytorch, HTML & CSS, MongoDB, jQuery, Java, ReactJS, C, Assembly, Unix-Shell Usage, No-SQL database services (Firestore), Operating Systems, Task Management, Project Management, Optimisation, APIs, Software Design