Larry Law

CS Senior, National University of Singapore
Research Intern, DSO National Laboratories

Research Interest

- Natural Language Processing
- Machine Learning

Education

- **National University of Singapore** *Aug. 2018 – May. 2022 (expected)*
  Bachelor of Computing in Computer Science; GPA: 3.54/4 or 4.42/5
- **Raffles Institution** *Jan. 2010 - Dec. 2015*
  GCE 'A' Levels; 6 Distinctions

Honours And Awards

- Dean's List *Jan. 2021 - May. 2021*
- Enrolled in the Turing Programme, a NUS invitation-only research programme. *Jan. 2021*
- Placed in the University Scholar's Programme Honour Roll. *Aug. 2019 - May. 2020*

Research Experience

- **DSO National Laboratories** *May 2021 - Present*
  Research Intern, Probing Multi-lingual Embedding (under Dr Chieu, Prof Lee Wee Sun, and Lim Jing)
- **National University of Singapore** *May 2020 - May 2021*
  Research Student, Integrating Bayesian Optimisation with Network Morphism (under A/P Bryan Low)
  - Proposed a **planning framework that integrates Network Morphism (NM) and non-myopic Bayesian Optimisation (BO)**: non-myopic BO accounts for the morphing of architectures which perform well in the long run while NM provides non-myopic BO with the cheaper objective function by recycling weights.
  - Showed that **Bayesian Sequential Decision Problem (B-SDP) naturally ties together NM and non-myopic BO** because NM serves as the transitions between states in B-SDP while B-SDP is a problem formulation common in non-myopic BO.
  - **Module Grade: A^+**. Links: [Report] [Slides]

Projects

- **Automatic Github Issue Labeller** *Mar 2021 - May 2021*
  CS4248: Natural Language Processing
  - **Published a Github Action that automatically labels github issues using NLP** in the marketplace.
  - **Outperforms traditional regex approaches** in F1 score (0.8723 vs 0.3634) and accuracy (0.8752 vs 0.5267) on our test set.
  - **Module grade: A.** Links: [Marketplace] [Poster] [Report]
- **DuckieNet** *Aug 2020 - Nov 2020*
  CS2309: Research Methodology
  - Proposed **DuckieNet**, a model which **integrates planning with Semantic Segmentation for Goal-Directed Autonomous Navigation in Crowded Environments**.
  - **Demonstrated efficacy and feasibility** by testing DuckieNet **on the simulated self-driving car environment, DuckieTown.**
  - **Module grade: A^+.** Links: [Report] [Demo] [Code]

Programming Skills

- **Languages**: Python, Bash, Java, Javascript
- **Technologies**: PyTorch/TensorFlow/Keras, Scikit-Learn/pandas/numpy, Docker