

Zhenyuan (Desmond) Liu

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👤 desmondly.me · in linkedin/desmondly

Education

The Chinese University of Hong Kong (CUHK)	2017.08 – 2021.07 (expected)
BSc. in Computer Science. GPA: 3.79/4.00. Major GPA: 3.95/4.00.	
University of Toronto	2020.01 – 2020.04
Exchange Program	

Research Experience

Worst-case Rigidity Analysis and Optimization for Assemblies	2020.07 – 2021.05
<ul style="list-style-type: none">• Advisor: Prof. Fu Chi-Wing, CUHK• Under-review at SIGGRPAH ASIA 2021• Model an assembly structure with different mechanical joints by stiffness matrices and linear constraints, and formulate an optimization problem. Then solve it to predict motions, measure and optimize structural stability in a unified framework.	
Saving Computation by Slicing Neural Networks Using SVM	2020.06 – 2020.09
<ul style="list-style-type: none">• Advisor: Prof. Anand Sarwate, Rutgers University• Funded by Professor Charles K. Kao Research Scholarship• Collected intermediate data in the middle layers of neural networks and used SVM to do binary classification for early stopping during inference time to save computation.	
Generating Adversarial Examples in Text Classification	2019.06 – 2019.09
<ul style="list-style-type: none">• Advisor: Prof. Michael R. Lyu, CUHK• Faculty 2019 Summer Research <i>Best Project Award</i>• Attacked state-of-the-art text classifiers (mainly neural nets) via white-box and black-box methods, then compared and analyzed the results of different attack strategies.	

Work Experience

Backend Development Intern, Tencent, China	2021.01 – Present
<ul style="list-style-type: none">• Develop and maintain the backend billing platform that processes millions of API invocations for the cloud security services provided by Tencent Cloud in close collaboration with other team members.• Develop using Golang the backend of an internal data service that aid other co-workers to access and analyze the data in an efficient and convenient manner.	

Awards and Honors

Arthur and Louise May Memorial Scholarship	2020
Professor Charles K. Kao Research Exchange Scholarship	2020
Outstanding Academic Performance Scholarship, Dept. of CSE	2018/19, 2019/20
ELITE Stream Scholarship, Fac. of Engineering	2017/18, 2018/19
Dean's List, Fac. of Engineering	2017/18, 2018/19, 2019/20

Skills

Professional Skills

- Programming Languages (Proficient): Python, C/C++
- Programming Languages (Familiar): Go, Java, JavaScript, TypeScript, Clojure, HTML/CSS, Dart, R
- Scientific Computing and Learning: Eigen, TensorFlow, PyTorch, scikit-learn
- Web/Mobile/Desktop Development: Vue, Flutter, React Native, Electron
- Cloud and Big Data: AWS, Hadoop

Language Skills

- Mandarin (Native), English (Proficient), Cantonese (Familiar)