Declaration of Possible Conflict of Interest

Are you/Will you be* nominated for any positions in the Management Committee of other clubs/societies/JCRCs* or for the position of NUSSU representative of other clubs? (* Delete if Necessary)

Yes ☐   No ☑   If yes, please state the committee(s): _____

Declaration of Commitments

My current/potential commitments are: (IF YOU ARE STAYING IN A HALL OF RESIDENCE, PLEASE STATE HERE)

Teaching Assistantship for CS3243.

I don't stay in a hall, but I stay in PGPR.

(ATTACH ADDITIONAL A4-SIZED PAPER IF REQUIRED)

Declaration of Interest

Why I want to be a part of the NUS Students' Computing Club Management Committee:

I want to be involved in the student community by contributing toward ~~made~~ the IT support of the Computing Club. I hope to carry on ~~and~~ the current standard of work, and to ~~possibly~~ improve the IT support infrastructures in various possible areas.

(ATTACH ADDITIONAL A4-SIZED PAPER IF REQUIRED)

List down all skill(s)/experience(s) relevant for your intended position:

Please see attached CV, or view online at leeyiyuan.info

(ATTACH ADDITIONAL A4-SIZED PAPER IF REQUIRED)

Yiyuan **Lee**

Computer Science Undergraduate · Research Intern

National University of Singapore · Adaptive Computing Lab

✉ leeyiyuan@u.nus.edu | ⬡ LeeYiyuan | in leeyiyuan

Education

National University of Singapore
Singapore

Bachelor of Computing in Computer Science and Mathematics
2017 - 2021

- Current CAP/GPA: 4.76/5.00.
- Specialization in artificial intelligence and numerical optimization.

Nanyang Junior College
Singapore

Singapore-Cambridge GCE Advanced Level
2013 - 2014

- Rank Point: 85/90.
- Distinction in H3 Science Research (Nanyang Research Programme - "Model of a Quantum Bit").
- Distinction in H3 Mathematics.
- Awarded Level Best in H2 Mathematics.

Skills

Frameworks	Linux (Arch, Ubuntu, Fedora), ROS, Unreal Engine, CUDA, PyTorch, NodeJS, AWS, Arduino, WPF, MySQL DB, Android, Apache
Programming	C/C++, Python, C#, Javascript, HTML/CSS, Java, MySQL
Languages	English, Chinese

Experience

Adaptive Computing Lab - National University of Singapore
Singapore

Research Intern (Prof. David Hsu)
Aug. 2019 - Present

- Currently working on algorithms and systems for planning under uncertainty in research areas related to self-driving cars.

Institute for Infocomm Research - Agency for Science, Research and Technology
Singapore

Research Intern (Dr. Yan Wu)
May. 2019 - Jul. 2019 | 3 mos

- Applied frame-wise convolutional and temporal convolutional neural networks to classifying materials using tactile data from the iCub robot.
- Investigated unsupervised approaches to classifying materials based on time-series tactile slide data: restricted Boltzmann machines, deep belief networks, variational autoencoders, deep Markov models.

Advanced Robotics Center - National University of Singapore
Singapore

Research Intern (Prof. David Hsu, A/P Marcelo H. Ang Jr)
May. 2018 - Apr. 2019 | 1 yr

- Developed and implemented practical and highly responsive planners for the navigation of car-like robots amidst moving obstacles.
- Integrated commonly used hardware and software packages in robotics perception, mapping, and localization: encoders, IMUs, lidars, stereo cameras, sensor fusion, Kalman filtering, PID control, gmapping, Monte Carlo localization, obstacle tracking.
- Software and electrical lead for the retrofitting and maintenance of test units.

Data Storage Institute - Agency for Science, Research and Technology
Singapore

Research Intern (Dr. Victor Leong, Dr. Leonid Krivitsky)
Feb. 2017 - May. 2017 | 4 mos

- Integrated various sensor and electrical components to software layers to facilitate the automation of experiments.
- Automated experiments to characterize the efficiency of avalanche photodiodes with respect to high voltage and temperature.

Signals - Singapore Armed Forces
Singapore

Software Developer · Supply Assistant (Comms.)
Feb. 2015 - Jan. 2017 | 2 yrs

- Developed software for the automated planning of radio frequency networks. Subsequently adopted across the entire Army.
- Developed software for inventory and loan tracking in managing supply stores. Subsequently adopted across all stores in CCO Stagmont.
- Developed experimental software for the automated scheduling of lesson plans for signal courses while satisfying resource constraints.

Experience (Others)

School of Computing - National University of Singapore
Singapore

Teaching Assistant
Aug. 2018 - Present

- Conducted weekly tutorial groups for CS1101S: Programming Methodology.
- Conducted weekly tutorial groups for CS3243: Introduction to Artificial Intelligence.

20th Management Committee - NUS Students' Computing Club *Singapore*
Academic Director *Sep. 2017 - Aug. 2018 | 1 yr*

- Oversaw manpower and logistical efforts for the organization of various academic related student run events.
- Organized various workshops and mock practical exams to acclimatize students to the content of core modules.

Honors & Awards

Year	Award	Location
2019	**Winner (Top 8),** Hack&Roll 2019	*Singapore*
2018	A*STAR Chairman's Honors List	*Singapore*
2017	A*STAR Undergraduate Scholarship	*Singapore*
2017	Full-time National Serviceman (NSF) of the Year Award	*Singapore*
2017	Commander's Coin (Chief Supply Officer)	*Singapore*
2016	Letter of Commendation (Signals Formation)	*Singapore*
2015	Commander's Coin (CO HQ Signals and Command Systems)	*Singapore*
2015	Best Soldier of the Month (HQ Signals and Command Systems) Award	*Singapore*
2014	Edusave Character Award	*Singapore*
2014	Edusave Award for Achievement, Good Leadership and Service	*Singapore*
2013	Represented Singapore to the World Robot Olympiad	*Indonesia*
2013	**Second Place,** National Junior Robotics Competition (Performance Category)	*Singapore*
2013	**Third Place,** National Junior Robotics Competition (Strategy Category)	*Singapore*
2013	**Merit Prize,** SUTD Technology & Design Challenge	*Singapore*
2013	Edusave Award for Achievement, Good Leadership and Service	*Singapore*
2012	**Silver Award,** Singapore Mathematical Olympiad (Senior)	*Singapore*
2011	Represented Singapore to the World Robot Olympiad	*United Arab Emirates*
2011	**First Place,** National Junior Robotics Competition (Performance Category)	*Singapore*
2011	**Second Place,** Singapore Robotic Games	*Singapore*
2011	**Bronze Award,** Singapore Mathematical Olympiad (Senior)	*Singapore*
2011	Edusave Award for Achievement, Good Leadership and Service	*Singapore*
2010	Represented Singapore to RoboCup	*Singapore*
2010	**Second Place,** National Junior Robotics Competition (Programming Category)	*Singapore*
2010	**First Place,** Singapore Robotic Games	*Singapore*
2010	**Silver Award,** Singapore Mathematical Olympiad (Junior)	*Singapore*
2009	Represented Singapore to the World Robot Olympiad	*South Korea*
2009	**Second Place,** National Junior Robotics Competition (Performance Category)	*Singapore*
2009	Edusave Award for Achievement, Good Leadership and Service	*Singapore*