

Emily Fatima Yunan
21 Lien Ying Chow Dr 34-03-648 Singapore 637296
m150097@e.ntu.edu.sg

EDUCATION

Nanyang Technological University (NTU), Singapore **Aug 2015 - Jun 2019 (Expected)**
Bachelor of Engineering (Mechanical Engineering) | Specialization: Robotics and Mechatronics
CGPA: 4.91/5.00 | Completed 125 credits

Temasek Junior College, Singapore **Feb 2013 - Dec 2014**
Distinctions in all 8 subjects taken in the 2014 A-level Examinations

AWARDS

2015-2019, ASEAN Undergraduate Scholarship & CN Yang Scholars Programme
2015/2016, 2016/2017, 2016/2017 MAE Dean's List
2015, School of MAE Chair's Award
2014, Ang Keong Lan trophy for best Science student in graduating class of 2014
2011-2014, Singapore Ministry of Education School-based Scholarship

ACADEMIC PROJECTS

M.E.C.A.tron, NTU **Feb - July 2017**

- Programmed an autonomous UGV with the inverse kinematics of the mecanum wheels and turret yawing and pitching control for visual servoing
- Participated in DJI RoboMasters international competition and clinched 2nd place in the knockout round

Nanyang Venture Electric Cars, NTU **Aug 2016 - March 2017**

- Programmed and implemented the torque vectoring system for yaw stability control of a car that improved the car efficiency by 8%
- Participated in Shell Eco-Marathon Asia as the team driver and won 6th place in the category for efficiency and 2nd place for safety

Temasek Junior College iPhone app, TJC Infocomm Club **Jun - Dec 2013**

- Worked in a team in designing and coding the college official iPhone app

RESEARCH EXPERIENCE

Motion Planning for Autonomous Evasive Maneuvers, CMU **Dec 2017 – Jul 2018**

- Designed and assembled an RC car test platform capable of localization and autonomous navigation
- Implemented motion planning and control algorithms for steady state drift cornering and evasive maneuver of dynamic obstacles under high speed

Biomechanical Study of Skin for Adhesion Diagnosis, NTU **Dec 2016 - May 2017**

- Designed the experimental test rig and conducted experiments to diagnose adhesion caused by scar tissues through a rheological study of synthetic skin
- Processed and analyzed resulting data to study the effects of adhesion on the viscoelastic behavior of skin

Waste Heat Driven Adsorption and Desalination System, NTU **Dec 2015 - May 2016**

- Conducted experiments to evaluate the waste heat driven adsorption chiller and desalination system performance in terms of cooling and water production
- Analyzed the resulting data to determine the optimum operating conditions in terms of temperature and cycle time

WORK EXPERIENCE

Engineering Intern, ST Engineering **Aug 2018 - Present**

- Developing a reinforcement learning navigation module for autonomous vehicle operating in Singapore public roads

MAE Peer tutor **Aug 2016 - Dec 2017**

- Tutoring six other students in Mechanical Engineering courses
- Providing model solutions to past year papers

CPG Corporation, IT Division – IT Engineering Intern **Nov - Dec 2013**

- Adapted the company's portal website to a mobile version and assisted in its implementation
- Reviewed and updated weekly articles on the company's portal

CO-CURRICULAR ACTIVITIES

NTU CN Yang Scholars' Club, Press & Publicity Assistant Director **Sep 2015 - Sep 2016**

- Covered monthly club events through poster design, photo taking and post-event processing of photographs
- Managed club website and Facebook page

Earthlink NTU, Secretary of Recycling Subcommittee **Aug 2015 - Aug 2016**

- Planned and organized recycling events such as biannual recycling drive, electronic waste campaign and inter-hall recycling competition
- Collected a total of 2.5 tons of recyclables from the recycling drive and reached out to 300 participants in the campaign
- Created two videos for event publicity and promotion of recycling to the NTU community

SKILLS

Microsoft Office	SolidWorks
Programming: C/C++/Python	MATLAB
Machine Learning	Adobe Photoshop/Lightroom/After Effects

LANGUAGES

English (fluent)	Chinese (conversational)
Indonesian (proficient)	Spanish (basic)