

# Ryan Pee

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## EDUCATION

Nanyang Technological University (NTU), Renaissance Engineering Programme (REP) Aug 2016 - Dec 2020

- Double degree comprising Master of Science in Technology Management and Bachelor of Engineering Science (Materials Science and Engineering)
- Awarded the REP scholarship
- Honors (Highest Distinction) with CGPA of 4.61/5

Northwestern University (NU)

Sep 2018 - Jun 2019

- Exchange student, concurrent with REP for 1 year
- Attained the Segal Design Certificate (a program focused on developing design and problem-solving skills)

## WORK EXPERIENCE

**Querry Simpson Institute for Bioelectronics**, Undergraduate Researcher (*Evanston, US*) Mar - Aug 2019

- Offered a summer fellowship to pursue an independent research project for the ideation and development of a new sensor which aimed to use sweat to detect toxic metals in the body
- Designed the sweat sensor by collaborating with other researchers, iterating through various materials, chemicals, and techniques to devise a working prototype
- Trained in cleanroom environment for wafer fabrication

**Essilor**, Process Engineer Intern (*Paris, France*)

Jun - Sep 2018

- Took charge of and refined a feasibility study on optical polymers which could help automate a manual step in the lens manufacturing process flow for Essilor
- Consolidated and analyzed data, making substantial findings which resulted in co-author credits for a research paper in the scientific journal *Surface Topography*

## PROJECTS

Microstructural Evaluation of Laser Bed Additive Manufactured Steels research project Aug 2019 - May 2020

- Investigated the effects of the microstructure on the material properties of 3D-printed steels by employing characterization techniques, culminating in a 40-page report which has been proposed as a research publication

**World Wildlife Fund**, Sustainable Reconstruction design project

Jan 2019 - May 2019

- Collaborated with a WWF research team to tackle the issue of materials sourcing and debris management in natural disaster management by employing design methodologies to brainstorm and refine ideas
- Proposed a recycled concrete prototype made from debris which could complement WWF's building guide

## CO-CURRICULAR ACTIVITIES AND LEADERSHIP

NTU, Renaissance Engineering Club, REPlay Instructor

Aug - Sep 2019

- Planned and facilitated improvisation sessions with a group of 5 interested beginners, guiding them through a series of themes and equipping them with basic improvisation skills

NU, Improvisation Ethics Project, Stage Actor

Apr - Jun 2019

- Performed in an experimental play in front of an audience of 50 where parts of the play were improvised based on audience suggestion, developing public speaking and quick-thinking skills

NTU, Track and Field School Team, Athlete

Sep 2016 - Apr 2018

- Represented NTU in the Singapore Athletics Inter-Club Championships 2017 for Men's Long Jump

NTU, Renaissance Engineering Club, Business Management Leader

Sep 2016 - Jun 2017

- Coordinated a team of 5 to liaise with companies for sponsorship opportunities for a Freshman Orientation Camp with a turnout of 70 participants

## SKILLS

- Programming: VBA, R, Python, C (Basic)
- Software: ImageJ, Microsoft Suite, GIMP, SolidWorks (Basic)
- Languages: English (Native), Mandarin (Proficient), French (Beginner)
- Interests: Fitness (Calisthenics, Yoga), Sports (Skateboarding, Badminton), Music (Guitar), Volunteering