

# Russel Bradley

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## EDUCATION

- National University of Singapore, Singapore (4.47/5.00)** **Aug 2017 – Jul 2021**
- Bachelor of Engineering (Hons.), Mechanical Engineering with 2<sup>nd</sup> Major in Innovation & Design, Minor in Computer Science
  - Studied topics on Manufacturing Engineering, DfMA, CAD & CAM, tool design and manufacturing automation
  - ASEAN Undergraduate Scholarship and AY2018/2019 Semester 1 Dean's List
- MIT xPRO (Massachusetts Institute of Technology), USA, Online** **Sep 2020 – Jan 2021**
- Professional Certificate, Additive Manufacturing for Innovative Design and Production
- University of California Merced, United States of America (4.0/4.0)** **Jan 2020 – May 2020**
- Non-Graduating, Student Exchange Program (Study Abroad Program) in Computer Science and Engineering
  - Completed courses on Software Engineering, Computer Networks, Algorithms and Computer Aided Engineering

## Professional Development

- Fundamentals of Manufacturing Processes (MITx on edX)
- Manufacturing Systems I (MITx on edX)
- Manufacturing Process Control I (MITx on edX)
- Supply Chains in Mfg: Capacity Planning (MITx on edX)

## CERTIFICATIONS

- Certified SolidWorks Professional – Mechanical Design
- Autodesk Certified Professional - Design for Manufacturing
- Siemens Solid Edge 2019 Professional
- Certified SolidWorks Associate -Additive Manufacturing

## WORKING EXPERIENCE

- SOLIDWORKS Student Leader (Intern) at Dassault Systèmes, USA (Remote)** **Oct 2020 – Present**
- Dassault Systèmes is a multinational company that mainly develops CAD software such as SOLIDWORKS and CATIA
  - Trained over 170 students on Computer Aided Design in Solidworks by conducting workshops & webinars
  - Certified over 125 students on Solidworks at the Associate and Professional Level
- Teaching Assistant at National University of Singapore, Singapore** **Jan 2019 – Present**
- ME2161 and TME2162: Manufacturing Processes, 420 students AY2020/2021
  - EG2301: Case Studies in Innovation, 100 students AY2019/2020, 120 students AY2020/2021
  - EG1311: Design and Make, 60 students AY2019/2020
  - CS1010E: Programming Methodology, 20 students AY 2018/2019
- Algorithm Intern at Lexikat (Vox Dei Pte Ltd), Singapore** **Jun 2020 – Aug 2020**
- Lexikat is a text analytics software that helps to capture topics and visualize text data
  - Designed and improved algorithms to process millions of pages of Bahasa Indonesia text data in Python and C++
  - Built the initial text analytics prototype to expand to the Indonesian market
- Autodesk Fusion Catalyst Intern at Autodesk Asia Pte Ltd, Singapore** **Jan 2019 – Dec 2019**
- Autodesk is a multinational company that develops CAD and modelling software for manufacturing, construction and media
  - Promoted Autodesk Fusion 360 (cloud-based CAD, CAM & CAE software) to NUS students and professors
  - Conducted weekly workshops and courses on CAD and its applications using Autodesk Fusion 360 to a total of 500 students
  - Successfully integrated Autodesk Fusion 360 into 2 NUS modules, increasing outreach to an additional 700 students
- Automation Engineering Intern at Structo Pte Ltd, Singapore** **May 2019 - Aug 2019**
- Structo is a digital dentistry company that manufactures high throughput resin-based 3D printing solutions
  - Conducted quality and reliability testing, FMEA, and DfX analysis of MSLA (Mask Stereolithography) 3D Printers
  - Designed and manufactured parts and subassemblies for automation systems using Computer Aided Design
  - Delivering world's first fully automated robotic production line capable of printing thousands of unique products per day

## ORGANISATIONAL AND COMMITTEE EXPERIENCE

- NUANSA Cultural Productions, Producer (Project Director)** **Jan 2019 – Dec 2019**
- Planned and managed an Indonesian cultural production worth over SGD 50 000
  - Headed team of 112 people from different departments from external relations, artistic and production
  - Improved cash flow by significantly reducing production costs by 60%
- NUS Residential College 4, RC4SPACE, Vice President** **Aug 2018 – Aug 2019**
- Spearheaded a student-led makerspace initiative
  - Organized weekly hands-on workshops on technology (Arduino, Raspberry Pi, Python programming, Telegram bot)
  - Initiated a project on an automated laundry notification system used by more than 600 people
  - Developed e-learning and course material on 3D Printing and CAD
- PINUS (NUS Indonesian Students Association), Finance Director** **May 2020 – Present**
- NUS Residential College 4, RC4 Music Expression, Treasurer** **Aug 2018 – May 2019**

## SKILLS SET

- Languages: Fluent in written and spoken English and Bahasa Indonesia, Limited working proficiency in Mandarin
- IT skills: Proficient in Microsoft Office Suite, Proficient in G-Suite, Comfortable on using Windows, MacOS and Linux
- Programming Languages: C, C++, Java, Python, HTML, CSS, nesC (TinyOS), MATLAB
- Others: Teamwork, Collaborations, Project Management, Public Speaking, Design Thinking, Systems Thinking