

# Russel Bradley

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## EDUCATION

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### **Master of Engineering in Manufacturing, Massachusetts Institute of Technology (MIT) [5.0/5.0] Sep 2021 – Present**

- Relevant Coursework: Manufacturing Processes, Manufacturing Systems (Lean), Process Control (SPC/6 Sigma), Supply Chain Design (Capacity & Inventory Management), Operations, Analytics & Machine Learning
- Professional Certificate in Additive Manufacturing for Innovative Design and Production

### **Bachelor of Engineering in Mechanical Engineering, National University of Singapore [4.51/5.0] Aug 2017 – Jun 2021**

- Second Major in Innovation and Design, Minor in Computer Science
- Relevant Coursework: Manufacturing, DfMA, CAD & CAM, Tool Design, Industrial Automation, Database Systems
- ASEAN Undergraduate Scholarship

### **Exchange Student, University of California – Merced [4.0/4.0] Jan 2020 – May 2020**

- Relevant Coursework: Algorithms Design and Analysis, Computer Networks, Software Engineering

## INTERNSHIPS

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### **Algorithm Intern, Lexikat (Vox Dei Pte Ltd), Singapore Jun 2020 – Aug 2020**

- Lexikat is a text analytics web application 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

### **Fusion Catalyst Intern, Autodesk, Singapore Jan 2019 – Dec 2019**

- Conducted weekly workshops and courses on Computer Aided Design and its applications to a total of 500 students
- Aided in the integration of Autodesk Fusion 360 software into 2 NUS courses; Increasing outreach to another 700 students

### **Automation Engineering Intern, Structo Pte Ltd, Singapore May 2019 – Aug 2019**

- Conducted quality and reliability testing, FMEA, and DfX analysis on MSLA (Mask Stereolithography) 3D Printers
- Designed and manufactured jigs, fixtures, parts, and subassemblies for automated production system
- Delivering world's first fully automated robotic production line capable of printing thousands of unique products per day

## OTHER WORKING EXPERIENCES

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### **Solidworks Student Leader (Intern), Dassault Systèmes, USA (Remote) Oct 2020 – Aug 2021**

- Trained and certified over 300 students in Mechanical Design and Manufacturing

### **Teaching Assistant, National University of Singapore, Singapore Jan 2019 – May 2021**

- I love to share my knowledge and experience through teaching
- Taught a total of 6 courses including: Manufacturing Processes, Programming in C, and Case Studies in Innovation
- Formally taught a total of more than 1000 students at NUS; receiving impressive teaching feedback scores (4.4/5.0)

## ORGANIZATIONAL EXPERIENCES

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### **Finance Director, PINUS (NUS Indonesian Students Association) May 2020 – May 2021**

### **Producer (Project Director), NUANSA Cultural Productions Jan 2019 – Dec 2019**

- Planned and managed a student led Indonesian cultural musical production worth over SGD 50 000
- Headed a diverse team of 112 people in different departments from external relations, artistic, and production

### **Vice President, RC4SPACE at NUS Residential College 4 Aug 2018 – Aug 2019**

- Spearheaded a student led makerspace initiative; Incubating student projects and organizing weekly technology workshops

## RELEVANT PROJECTS

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- Operations and Supply Chain Improvement of Steel Crate Assembly Line through Simulation
- Using Segmented Images to Improve Bicycle Image Reconstruction and Generation with Variational Autoencoders
- Industrial Vending Machine for Engineering Components such as Nuts & Bolts
- 5-Axis Fused Deposition Modelling (FDM) 3D Printer

## SKILLS

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**Language:** Fluent in written and spoken English and Bahasa Indonesia, Limited working proficiency in Mandarin

**Software:** Microsoft Office Suite, Certified Professional in Solidworks, Tableau

**Programming Languages:** Python, SQL, C++, C, Java, R, MATLAB, HTML, CSS

**Others:** Leadership, Project Management, Teamwork, Design Thinking, Analytics, Continuously Learning