Thomas Chengattu

GRADUATE MECHANICAL ENGINEER

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Education

| University of California, Berkeley | Berkeley, CA |
|---|--------------|
| MASTERS IN ENGINEERING MECHANICAL ENGINEERING | May 2018 |
| Concentration in Product Design | GPA 3.52 |
| Arizona State University | Tempe, AZ |
| BACHELOR OF SCIENCE IN ENGINEERING MECHANICAL ENGINEERING | May 2017 |
| New American University Provost Scholarship Recipient | GPA 3.79 |
| Experience | |

Intel Corporation

SUPPLY CHAIN ENGINEER FOR ASSEMBLY EQUIPMENT & MEDIA

- Managed capital equipment with multiple suppliers, and completed 20 quality improvement projects.
- Leveraged negotiation skills to save \$10,000 for machine purchase
- Used engineering knowledge to drive supplier working group meeting and facilitate timeline for technology development
 Influenced internal and external stakeholders for managing deadlines effectively and prioritizing critical tasks

Arizona Center for Algae Technology and Innovation

FIELD SITE ASSISTANT

- Fixed and replaced 1/3 of the drainage pipes involved in safely removing contaminated pond samples
- Daily tasks involved cleaning the photobioreactors, and fixing clogged water pumps

Technical Skills

CAD /CAM /CAE Solidworks, Rhinoceros, Autodesk Fusion, Cut3d, VCarve Pro, Ansys, Ansys Fluent **Programing** Python, Matlab, Latex, Arduino, LabVIEW **Miscellaneous** Microsoft Office Suite, JMP, Avizo, PSpice

Projects.

Developing an Optimal Controller for Electric Vehicle

GRADUATE CONTROLS - CLASS PROJECT

- Used the MATLAB environment along with Model Predictive and Dynamic Programing strategies to develop controllers
- Challenges involved addressing the nonlinear nature of the power-train efficiency, and incorporating regenerative braking

Vanguard - Martian Space Gloves

GRADUATE CAPSTONE PROJECT

- Applied human-centered design techniques to identify customer needs and create quantitative goals
- Prototyped numerous glove components to identify potential consumer issues with repetitive use

Chawla Research Group ASU

UNDERGRADUATE RESEARCH ASSISTANT

- Leveraged computer vision techniques and Avizo statistical analysis to identify relevant features in images
- Used three dimensional X-ray tomography study of corrosion-fatigue crack growth behavior in 7XXX-series Al alloys

Theta Tau Professional Engineering Fraternity

PROJECT CHAIR: ARCADE GAMING CABINET

- Researched, developed, engineered, and manufactured a unique arcade cabinet design with minimal budget
- Designed and constructed a reliable machine, with sufficient heat transfer, using first principle thermal fluid models
- Engineered specific solutions for given requirements to hone in on CAD & CAM skills
- Negotiated pricing and terms with artist for panel designing, with printing shop for vinyl, along with time at Techshop

| Relevant Course Work Distinctions | | | |
|-----------------------------------|--------------------------------------|--|--------------|
| Fall 2017 | Experiential Advanced Control Design | Graduate • Intel division recognition award | Oct 2016 |
| Fall 2017 | Human Centered Design | Graduate • Six Sigma Greenbelt | May 2016 |
| Fall 2016 | Applied Computational Fluid Dynamics | Undergraduate • ASU Dean's List Honors | 7x Recipient |
| Fall 2016 | Internal Combustion Engines | Undergraduate • Theta Tau Student Member Award | Spring 2015 |
| Spr.2016 | Thermofluids | Undergraduate | |
| Spr. 2016 | Principles of Mechanical Design | Undergraduate | |

Sept 2017 - Current

Dec 2017

Sept 2016 - April 2017

Jan 2016 - Sept 2016

Chandler, AZ

May 2016 - Aug 2017

Gilbert, AZ

May 2015 - Aug 2015