

PROFILE SUMMARY

- Product Engineer with 3+ years of experience in product design, development, and prototyping.
- Regularly use and operate 3D printers, laser cutting machines, panbrake press, and power tools.
- Certified SolidWorks Professional, Certified Sheetmetal, Weldments and Drawings Professional.
- Certified Kuka Robot Programming 2. Ability to work with cobots – UR10e, TM12, TM14.
- Master's degree specializing in Product Design and Additive Manufacturing.
- Key Skills – Design Thinking, DFX Principles, Solidworks (CAD and Simulation), programming (C++ and python)

EXPERIENCE

Product Engineer (Mechanical) | ManuFutures

DEC 2022 – PRESENT

- Spearheaded 2 data capture and consolidation activities for large production companies to determine project scope for effective and strategic execution.
- Engaged with stakeholders to identify industry gaps and needs to create project scope, resource utilization plan and project costs. Learned to implement project management skills for 2 small projects.
- Took ownership of 6 projects by successful implementation of design principles to develop prototypes or minimum viable products. Utilized rapid prototyping technologies - 3D printing and laser cutting.
- Created CAD models in SolidWorks, implemented configuration-based design, decided appropriate manufacturing technologies and materials for products, while taking make-or-buy decisions.
- Implemented design for manufacturing principles for sheet metal fabrication, 3D printing and injection moulding.
- Conducted DFMEA and static FEA simulations for design improvements and validation.
- Documented and created several reports for closing out of projects with clients.
- Utilized specialist equipments - 3D printers, sandblaster, laser cutter, bending machine, dyeing machine, cobots to manufacture and prototype according to tenant requirements.
- Worked to develop good relations with vendors, suppliers, clients and other departments within Deakin.

Design Engineer | Dispotronics

MAR 2021 – DEC 2021

- Formulated product specifications based on clients' sensor requirements to increase company turnover by 150%.
- Reverse Engineering and CAD modelling using Siemens NX of existing product range of 20+ products for catalogue creation.
- Design and development of custom wheelchair design for senior bedridden folk, providing ideal user experience.
- Methodical creation of engineering change documents, PPAP, PFMEA and DFMEA.

Simulia Developer | Dassault Systemes

JUL 2019 – FEB 2021

- Worked in a 9-member team to develop solution for optimizing CAD model with Numerical Methods of Optimisation.
- Utilized Object Oriented Programming using Model View Controller software architecture in C++.
- Acted as point of contact and mentor for all-girls high school in design engineering competition hosted by Dassault

EDUCATION

Master of Engineering | Deakin University


NOV 2020 – OCT 2022


- Dual Specialization in Product Design and Additive Manufacturing.
- Deakin Vice Chancellor's Professional Excellence Scholar, with 100% meritorious scholarship.
- Postgraduate Student Award and Postgraduate Student Project Excellence Award.
- 30-day internship at Conflux Technologies, focused on quality control testing of Metal 3D Prints and improvements in print quality.

SANIKA CHANDRACHUD

Product Engineer @ ManuFutures

[LinkedIn Profile](#) 

+61 452293428 

sanika.chandrachud@outlook.com 

Bachelor of Engineering (Mechanical) | Pune University

AUG 2015 – JUN 2019

- Graduated with first class distinction and 8.5 GPA.
 - 30-day internship at Atlas Copco Gecia, performed multi-iteration vibration analyses to study resonance during machining.
 - Conducted multi-variate Design of Experiments to scientifically provide an eco-friendly alternative for detergent (utensil). Designed innovative sheet-metal machinery for large scale production with a B2C business model. National top 12 design finalist amongst 1000 projects in Aakruti 2019. Presented at Solidworks World 2019 at Dallas, Texas.
 - Designed and manufactured an ATV for intercollegiate racing and endurance-based competition BAJA 2017. Implemented Ackermann steering mechanism for the car.
-

SKILLS

- | | |
|---|----------------------|
| ➤ Certified Forklift Operator (WorkSafe Victoria) | ➤ Project Management |
| ➤ Certified Solidworks Professional | ➤ Time management |
| ➤ Certified in programming for Kuka. | ➤ C++, Python |
| ➤ Trained to operate 3D Printers, Laser cutter, CNC Mill, Cobots. | |
-

ACTIVITIES

- Excited participant for any sports, mostly basketball, table tennis, volleyball.
 - Beginner surfer, hiker and enthusiastic swimmer
 - Voracious reader
-

REFERENCES

- **Glynn Atkinson** (glynn.atkinson@deakin.edu.au)
Senior Manager, ManuFutures, Deakin University
- **Siva Krishnan** (siva.krishnan@deakin.edu.au)
Associate Head of School of Engineering, Deakin University