

ARINDAM BRAHMA

 orcid.org/0000-0003-0365-0394

Hörsalsvägen 7 ◊ Göteborg, SE 412 58

+46 · 70 · 944 · 7681 ◊ arindam.brahma@gmail.com

EDUCATION AND RESEARCH

Chalmers University of Technology, SE
Post-doc researcher

Oct 2021 - Present

University of Auckland, NZ
Ph.D. Mechanical Engineering

Aug 2016 - Aug 2020

- Thesis title: Engineering design change propagation and its mitigation using margins.
- Main supervisor: Dr. David C. Wynn; Co-supervisor: Prof Xun Xu.
- University of Auckland Doctoral Scholarship.

The University of Nottingham, UK

Sep 2014 - Dec 2015

M.Sc. (Taught + research) in Mechanical Engineering - Distinction

- Developing Solutions Masters Scholarship
- Dissertation: Design of a mechanically activated support fixture (A novel Concept).
- Researched & developed a novel support mechanism for fixturing components with high amount of surface variation or thin and highly flexible structure such as turbine blades, ceramic components.

Manipal University, IN

Aug 2008 - July 2012

B.E. in Mechanical Engineering - CGPA : 8.46/10

TEACHING EXPERIENCE

Chalmers University of Technology
Course Supervisor - Product Design

*Oct 2021 - Present
Gothenburg, SE*

University of Auckland
Professional Teaching Fellow

*Aug 2019 - Dec 2019
Auckland, NZ*

- Lecturer of engineering design and manufacturing for part II mechanical engineering course.
- Involved in development of lab work for part II mechanical design and manufacturing course.
- >90% approval rating through SET survey.

University of Auckland
Graduate Teaching Assistant - Grade 4

*Mar 2017 - Jul 2020
Auckland, NZ*

- Lead tutor for mechanical design and manufacturing part II course.
- Assisted in course development for part II design and part IV product development course.
- Tutor for mechanical and mechatronics design part III and IV course.
- Tutor for part IV and Master's product development course.
- Lab instructor for part II mechanical design and manufacturing course.

INDUSTRIAL EXPERIENCE

Hydroxsys NZ Ltd
Lead Engineer - Research and Design

*Jun 2020 - Aug 2021
Auckland, NZ*

Larsen & Toubro Modular Fabrication Yard LLC

Executive Engineer – Commissioning

Feb 2016 - Jun 2016

Sohar, Sultanate of Oman

Larsen & Toubro Modular Fabrication Yard LLC

Executive Engineer – Quality and Commissioning

Sep 2012 - Aug 2014

Sohar, Sultanate of Oman

PROFESSIONAL MEMBERSHIPS

Reviewer - Journal of Engineering Design

Reviewer - Artificial Intelligence for Engineering Design, Analysis and Manufacturing

Student member - Engineering New Zealand

PRIZES AND SCHOLARSHIPS

2019 2nd Best presentation at Mechanical Engineering Postgraduate Conference, Auckland

2016 University of Auckland Doctoral Scholarship

2014 Developing Solution Masters Scholarship (University of Nottingham)

LANGUAGES

English - Fluent

Hindi - Native proficiency

Bengali - Native proficiency

PUBLICATIONS

Brahma, A., & Wynn, D. C. (2021). A study on the mechanisms of change propagation in mechanical design. *ASME. J. Mech. Des.*, 1–22. <https://doi.org/10.1115/1.4050927>

Brahma, A., & Wynn, D.C. (2020). Margin value method for engineering design improvement. *Res Eng Design* 31, 353–381. <https://doi.org/10.1007/s00163-020-00335-8>

Brahma, A., & Wynn, D. C. (2020). Calculating target thresholds for the margin value method using computational tools. In *Proceedings of the Design Society: DESIGN Conference (Vol. 1, pp. 111-120)*. Cambridge University Press <https://doi.org/10.1017/dsd.2020.66>

Brahma, A., & Wynn, D. C. (2018). A new model for capturing design information with an aim to aid change propagation assessment and subsequent redesign. In *DS 92: Proceedings of the DESIGN 2018 15th International Design Conference (pp. 1499-1510)*. <https://doi.org/10.21278/idc.2018.0271>