Ankan Mitra

Curriculum Vitae

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Education

08/2018 – Present **Doctor of Philosophy**, *Department of Industrial Engineering, Arizona State University, Tempe, AZ, USA.*
GPA: 3.86/4 (till Fall 2019)

08/2014 – 07/2018 **Bachelor of Engineering**, *Department of Production Engineering, Jadavpur University, Kolkata, WB, INDIA.*
GPA: 8.96/10 (First Class with Honours)
Rank in class: 1 in 38
Thesis: A hybrid multi-criteria decision-making model for optimal coal blending

Research and Work Experience

05/2019 – Present **Graduate Researcher**

05/2019 – Present *Department of Industrial Engineering, Arizona State University, USA.*
Topic: Large scal optimization of network models using combinatorial algorithms.
Advisor: Dr. Jorge Sefair

05/2017 – 07/2017 **Summer Research Intern**
Non-oxide Ceramics and Composites Division, CSIR - Central Glass and Ceramic Research Institute, INDIA.
Project: Study of machinability of sintered alumina and analysis using Grey-Fuzzy logic.
Advisor: Dr. Dipayan Sanyal

08/2015 – 07/2018 **Undergraduate Researcher**

08/2016 – 07/2018 *Department of Production Engineering, Jadavpur University, INDIA.*
Topic: Modelling and optimization of advanced machining processes, applications of decision making techniques.
Advisor: Dr. Shankar Chakraborty

08/2015 – 07/2018 *Department of Mechanical Engineering, Netaji Subhas Engineering College, INDIA.*
Topic: Optimization of longitudinal fins considering all non-linearity effects.
Advisor: Dr. Debasis Barman

06/2016 – 07/2016 **Industrial Trainee**
Brake Block Manufacturing Plant, Wabtec Texmaco Rail Private Ltd., INDIA
Studied different brake block manufacturing techniques (hands-on); online and offline inspection techniques; assembly operation of products; organisational structure; product manufacturing cycle.

Publications

Book Chapters

1 **A. Mitra**, S. Chakraborty, "Parametric optimization of laser beam machining processes using shuffled frog leaping algorithm", in "Focus on Swarm Intelligence Research and Applications", (eds. B. Benhala et. al.), Nova Science Publishers Inc, ISBN: 978-1-53612-452-1, pp. 21–44, (2017)

Journal Articles

4 **A. Mitra**, S. Chakraborty, "A hybrid multi-criteria decision making model for optimal coal blending", Journal of Modelling in Management, Vol. 14 (2), pp. 339–359, (2019)

3 **A. Mitra**, S. Chakraborty, "A multivariate quality loss function approach for optimization of spinning processes", Journal of The Institution of Engineers (India): Series E, Vol. 99 (1), pp. 101–109, (2018)

2 **A. Mitra**, S. Chakraborty, "Parametric optimization of abrasive water-jet machining processes using grey wolf optimizer", Materials and Manufacturing Processes, Vol. 33 (13), pp. 1471–1482, (2018)

1 S. Chakraborty, K.R. Ramakrishnan, **A. Mitra**, "A multi-criteria decision support model for optimal cotton fibre blending", The Journal of the Textile Institute, Vol. 109 (11), pp. 1482–1492, (2018)

Teaching Experience

05/2018 – Present **Graduate Teaching Assistant**

Spring 2020 *IEE 380 - Probability and Statistics for Engineering Problem Solving (Instructor: Dr. Michael Clough*

Fall 2019 *IEE 380 - Probability and Statistics for Engineering Problem Solving (Instructor: Dr. Michael Clough*

Spring 2019 *IEE 380 - Probability and Statistics for Engineering Problem Solving (Instructor: Dr. Linda Chattin*

Fall 2018 *IEE 380 - Probability and Statistics for Engineering Problem Solving (Instructor: Dr. Linda Chattin*

Fall 2019 **Teaching Internship**

IEE 620 - Optimization I (Instructor: Dr. Jorge Sefair

04/2015 – 03/2017 **Private Tutor**

Taught Physics, Chemistry and Mathematics to high-school students.

Awards and Honours

2018 – 2019 **CIDSE Doctoral Fellowship**

Awarded by School of Computing, Informatics and Desicion Systems Engineering (a prestigious fellowship offered in recognition of strong potential for conducting the highest quality graduate research for the academic year 2018-19)

12/2018 **University Medal**

Awarded by Jadavpur University
(for standing first in order of merit in Production engineering, at the Bachelor of Engineering Examination, 2018)

01/2018 **Meera Rani Mitra Memorial Award**
Awarded by Alumni Association NCE Bengal and Jadavpur University
(for securing highest marks in Production Engineering department, in the third year university examination held in 2017)

12/2016 **Indu Bhushan Putatunda and Shanti Sudha Putatunda Memorial Award**
Awarded by Alumni Association NCE Bengal and Jadavpur University
(for securing highest marks in Production Engineering department, in the second year university examination held in 2016)

2014 – 2018 **TATA Steel Millennium Scholarship**
Awarded by TATA Steel Limited

05/2014 **Certificate of Merit**
Awarded by Kendriya Vidyalaya Sangathan
(for securing position in the top 1.5% of K.V.S. students in the All India Senior School Certificate Examination 2014, conducted by CBSE)

Technical Skills

Programming	MATLAB, C, C++, Python, LINDO, AMPL
Optimization	GUROBI, CPLEX
Design & Modeling	AutoCAD
Web Development	HTML, CSS
Statistical Packages	Minitab, MS Excel
Representation	LaTeX, MS Office, Origin Pro

Graduate Coursework

Core Courses	Optimization I (IEE 620), Mathematical Statistics (IEE 670), Probability and Stochastic Processes (IEE 640), Optimization II (IEE 622), Foundation of Information Systems (IEE 605)
Electives	Network Flows and Algorithms (IEE 598), Graph Theory I (MAT 516), Foundation of Algorithms (CSE 551), Operations Research in Healthcare (IEE 526), Bio-inspired Algorithms in AI and Optimization* (IEE 598), Modeling with Game Theory* (AML 591), Advanced Quality Control* (IEE 570)

* -To be completed by Spring 2020

Extra-curricular activities

Hobbies	Singing, Painting, Table Tennis, Reading novels
08/2014 – 07/2018	Active participant in annual technical fest, SRIJAN (Jadavpur University)

Social Services

Volunteer and fund raiser at Help Age India (a non-profit NGO) for 2 years.

Last updated on March 22, 2020.