

# ARUNDHATI DIXIT

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## EDUCATION

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### Indian Institute of Technology Delhi

- *Major in Mechanical Engineering* — GPA 8.37/10

July 2016 - May 2020

Relevant coursework: Linear Algebra & Differential Equations, Calculus, Numerical Methods & Computations, Introduction to Statistics, Operations Research, Data Structures & Algorithms, Manufacturing System Design

- *Minor area in Economics*

July 2016 - May 2020

Relevant coursework: Introduction to Economics, Macroeconomics, Microeconomics, Econometric Methods, Global Political Economy, Political Development of Economy, Advanced Microeconomics

- Skills: Python, R, C, C++, Microsoft Office Suite, Adobe Suite, ANSYS Suite, SolidWorks, Matlab, Mastercam

### Amity International School, Gurugram

- Central Board of Secondary Education, Grade 12 — 97.8%

2016

- Central Board of Secondary Education, Grade 10 — GPA 10/10

2014

## INTERNSHIPS

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### Summer Intern — MFTBC Daimler AG, Kawasaki, Japan

June 2019 - July 2019

- Prepared data analysis, LPP and referencing for tooling negotiations spanning eight years for the department
- Devised Quick Calculation Tool Automation for costing on common platform in Japan, Germany, India and US
- Formulated cost cutting potential algorithm for any set of parts on gap between best fit and best practice lines

### Visiting Research Scholar — The Ohio State University, Columbus OH

May 2018 - July 2018

- Worked on manufacturing technologies, detailed software simulation and prototyping of power modular layout
- Analysed parasitic inductance and capacitance for design improvement and optimisation of parameters

### Corporate Social Responsibility Intern — Power Grid Corp. of India Ltd., Gurugram

July 2017

Planned and assisted in provision of vocational training to underprivileged girls and cleanliness drives in the city

## PROJECTS

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### Mobility as a Service

B.Tech Project; Prof. Nomesh Bolia

- Modelling costing, customer patterns and designing subscription for mobility as a service, not commodity
- Charting insights and anomalies to devise business idea using Operations Research tools with DP, NLP and AI

### Drivers of Currency Valuation and Exchange Rate

Ongoing; Prof. JJ Thomas

- Devising trade ideas on leading factors correlated with valuation by data analysis and global dynamics study
- Perusing data on US10Y, DXY, SPX, EEM, oil and gold prices for predictive valuation using ARIMA model

### Hotel Pricing Modelling

November, 2018; Prof. Ankush Agrawal

- Developed hedonic pricing model by data correlation analysis and estimation based on rent driving attributes
- Identified the leading indicators for discriminatory pricing and used adaptive modelling for increased generality

### Eight Puzzle Solver

March, 2019; Prof. Amit Kumar

- Emulated problem as undirected graph and used Dijkstra's algorithm with pruning for minimum cost solution
- Used greedy search algorithm and heuristics to find Manhattan distance for achieving minimal time complexity

## LEADERSHIP

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### Chief Editor, Board for Student Publications

May, 2018 - April, 2019

Led a team of 30 journalists and technical editors for the institute board for creative and journalistic publications

### Representative, Quizzing Club

July, 2017 - April, 2018

Organised hostel and institute level events, workshops and fresher orientations in addition to active participation

### Exchange Buddy, Alumni Affairs and International Programmes

July, 2018 - November, 2019

Mentored exchange students from France, South Korea and South Africa for smooth transition to IIT system

## HONOURS AND ACHIEVEMENTS

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- **Global Young Leaders Conference, Washington DC and NYC:** Shortlisted as Global Scholar, India 2019
- **Dhananjay Mohan Cup:** Received top honour in school for scientific temperament and achievements 2016
- **KVPY Fellow:** Conferred by DST, Government of India, rewarding scientific acumen and aptitude 2015
- **NTSE Scholar:** Awarded by Govt. of India for top meritorious students throughout academic life 2014
- **German Level 1:** Certification from Berlitz Language Centre for proficiency in conversation and writing 2013

## INTERESTS AND ACTIVITIES

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- Student Volunteer with Jean Dreze since November 2019, addressing developmental issues faced by Indians
- Dance (eight years of professional training in Kathak- Senior Diploma, Prayag Samgeet Samiti)
- Digital designing and making comics ([www.instagram.com/syrup.n.spice/](http://www.instagram.com/syrup.n.spice/))