KARAN MIDDHA

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EDUCATION

<u>Master of Science in Industrial and Systems Engineering</u>   *May 2019*
- *The State University of New York at Binghamton*

<u>Bachelor of Technology in Mechanical Engineering</u>   *May 2017*
- *SVKM's Mukesh Patel School of Technology Management and Engineering*

KNOWLEDGE AREAS

- Advanced Topics in Integrated Manufacturing, Advanced Topics in Processes for Electronics Packaging, Modeling & Simulation, Operations Research, Applied Statistics & Probability, Enterprise Systems Engineering, Materials for Manufacturing, Processes for Electronic Packaging, Principles of Systems Engineering, Engineering Mathematics, Engineering Thermodynamics, Strength of Materials, Fluid Mechanics, Theory of Machines, Machine Drawing, Fluid Machinery, Materials Engineering, Environmental Engineering & Management Systems, Industrial Electronics, Thermal Engineering , Manufacturing Processes, Design of Machine Elements, Mechatronics & Controls, Mechanical Measurement & Metrology, Machine Shop, Industrial Engineering, Heat Transfer, I.C. Engines, Vibration Engineering, Manufacturing Management, Presentation & Communication Techniques, CAD/CAM/CIM, Design of Mechanical Systems, Refrigeration & Air Conditioning, Finite Element Analysis, Total Quality Management, Additive Manufacturing, Engineering Economics & Accounting.

VOLUNTEER WORK

- Volunteer at TEDx Juhu "The Ripple Effect"   *April 2016*

WORK EXPERIENCE

<u>Provider Data Operations Researcher: Zocdoc, Pune, India</u>   *February 2021 –*
- Training on work tools, process workflow. Meeting metric goals for productivity and accuracy. Data-verification of structured or unstructured research using search tools, applications. Daily reporting of using available reporting tools. Communicating impediments in process workflow to team head and responding to emails in appropriately and in a timely manner. Aware of latest guidelines, policies impacting work. Developing projects, processes focusing on data-integrity, workflow solutions.

<u>Part-time Student Worker: Sodexo USA Inc., Binghamton, USA</u>   *March 2018 – May 2019*
- Performed event setup, execution, and breakdown of up to 2500 people as a catering worker. Performed customer service as a dining hall worker.

<u>Warehousing Intern – Meritt Transmissions, Bhiwandi, India</u>   *June – July 2016*
- Stored chains, sprockets, couplings, gears, and conveyor belts. Recorded and prepared shipment items. Checked outbound shipments for readiness of delivery.

<u>Maintenance Intern – Supreme Treon Pvt. Ltd., Vapi, India</u>   *June – July 2015*
- Worked with the maintenance team and observed the production of non-woven/automotive fabric. Manufactured fabric included melt-blown, spun-laid, flash-spun, air-laid, and bonded fabric. Helped install collector/accumulator machine and assisted in preventive, breakdown maintenance. Observed opening/blending, carding/web-forming, cross-lapping, needling and chemical bonding.

ACADEMIC PROJECTS

<u>Implementation of ERP and Blockchain Technology in a Warehouse</u>   *August 2018 – May 2019*
- Explored blockchain technology and its implementation in warehouse. Suggested blockchain implementation in warehouse, alongside pre-existing ERP system.

<u>Development of a Req. Driven Top Level Functional System Architecture</u>   *July – August 2018*
- As a team, provided a thoroughly developed system requirements baseline and system validation strategy for an automated money handling machine.

<u>Implementation of Bus Concept in Eliminating Bottlenecks</u>   *January – May 2018*
- Worked with teammates to devise "Bus Concept" for bottleneck elimination. Used Shortest Route Method to achieve lead time in carbide-insert production facility.

<u>Modeling and Simulation: Reducing Total Wait-Time at Dunkin Donuts</u>   *January – May 2018*
- Worked with team to understand service constraints at SUNY Binghamton's Dunkin' Donuts. Determined number of servers for efficient management of customers using Arena Simulation.

<u>Operations Research: Solving Linear Programming Problems Using AMPL</u>   *January – May 2018*
- Created a mathematical model of Linear Programming Problems in the given case study. Solved the maximization and minimization linear programming problems using AMPL.

Demand Response Analysis in T & D of Power in the United States   August – December 2017

- Documented the power/electric transmission line projects in the US using Microsoft Excel. Computed a Decision Support System to identify upcoming projects using Microsoft Excel.

PROFESSIONAL CERTIFICATIONS

Business Analysis Modelling Skills and Techniques – The BA Guide   May 2020

- *Topics* – Introduction to Visual Modelling, SWOT Analysis, Use Cases, Organization Chart, Stake holder Map & RACI Matrix, Scoring Matrix, Process Flowcharts, User Stories.

Business Analysis Fundamentals – The BA Guide | Jeremy Aschenbrenner   May 2020

- *Topics* – Software Development Lifecycles, Initiating a Project, Requirement Basics, Requirement Elicitation, Requirement Analysis, Requirement Specification, Requirements Approval, After the Project.

Lean Six Sigma Green Belt Online Course – Udemy   May 2020

- *Topics* – Getting Started with Six Sigma, Six Sigma Problem Solving Approach, Listening to Customers, Completing a Project Charter, Process Mapping Tools, Cause & Effect Relationships, Measurement System Analysis (MSA), Data Collection, Planning & Execution, Data Sampling, Introduction to Business Statistics, Graphical Analysis Methods, Assessing Process Capability, Root Cause Analysis, Theory of Hypothesis Testing, Performing Hypothesis Tests, Quantification of Opportunity to Improve, Generating and Screening Solutions, Lean Management Systems, Failure Modes & Effective Analysis, Statistical Process Control, Control Plan.

Logistics and Supply Chains – Fundamentals, Design, Operations   September 2019

- *Topics* – Supply Chains Management & Logistics, Logistics Strategy, Supply Chain Integration, Demand Management, Planning & Controlling of Flow of Materials, Managing Capacity, Customer Relationship Management, Purchasing & Procurement, Inventory Management, Location Decisions, Warehouse Management, Global Logistics Operations, Transportation, Workforce Management, Health & Safety Considerations, Performance Measurement , Risk Management, Reverse Logistics, Sustain ability, Link between Finance & Operations, Lean Accounting Productivity Management, Technology in SCM, Project Management, Outsourcing, Business Process Management, Continuous Improvement.

Blockchain for Business – An Introduction to Hyperledger Technologies   April 2019

- *Topics* – Distributed Ledger Technology (DLT), Bitcoin and Ethereum Blockchains, Exploring Permissionless Blockchains, Consensus Algorithms, Other Open Source Distributed Ledgers, Hyperledger, Challenges in the Adoption/Deployment of Distributed Ledger Technologies, Hyperledger, Hyperledger Frameworks, Hyperledger Modules, Existing Blockchain Use Cases, When to Use or Not to Use Blockchain Technologies, Installation Instructions for Linux, Installation Instructions for MacOS, Installation instructions for Windows, Key Components, Joining the Hyperledger Iroha Community, Addressing Illegal, Unregulated, and Unreported Tuna Fishing (Demonstrated Scenario), Key Components and Transaction Flow, Installing Hyperledger Sawtooth, Writing an Application, Joining the Hyperledger Sawtooth Community, Addressing Illegal, Unregulated, and Unreported Tuna Fishing (Demonstrated Scenario), Key Components and Transaction Flow, Installing Hyperledger Fabric, Understanding Chaincode, Writing an Application, Joining the Hyperledger Fabric Community.

Blockchain: Understanding Its Uses & Implications – The Linux Foundation   April 2019

- *Topics* – Basis of Blockchain, Distributed Ledgers, Cryptography, Transparency, Immutability, Smart Contracts, Blockchain Security, Public and Permissioned Blockchains, Blockchain Flow, Consensus and Fault Tolerance, Governance and Blockchain, Identity and Anonymity on Blockchain, Standard vs. Blockchain Governance, Consensus, Governance with Autonomy, Governance for Enterprise, Immutability, Transparency, Autonomy, Multi-Party Transactions, Double Spend, Blockchain Use Cases, Healthcare, Voting, Identity Management, Land Records and Government, Blockchain with Supply Chain, Internet of Things (IoT), Energy, Future of Blockchain.

IELTS International English Language Testing System   February 2019

- Overall – 9.0/9.0, Listening – 8.5, Reading – 9.0, Writing – 8.5, Speaking – 9.0

Basic and Advanced Microsoft Excel: Compufield Computer Institute   June 2016

- *Topics* – Performing Complex Calculations More Efficiently Using Various Excel Functions, Organizing and Analysing Large Volumes of Data, Creating MIS Reports, Designing and Using Templates, Consolidating and Managing Data from Multiple Workbooks.

Soft Skills: NMIMS MPSTME Mumbai   May 2013

- *Topics* – Psychological Profiling, Defining Personality & Adjustment, Time Management, Interpersonal Relationship through developing Emotional Intelligence, Managing Conflicts, Teamwork - Collaboration, Introduction to HR Recruitment Process, Business Attire, Corporate Etiquette, Critical Thinking, Reasoning & Analysis, Developing Innovation & Creativity Mindset, Communication Strategies, Articulation & Listening, Personal Interview, Group & Case Discussion, Tips on CV/Resume Building.