Aarohi Kapadia

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EDUCATION

Carnegie Mellon University (CMU), Pittsburgh, PA **May 2024**

Master of Science: Biomedical Engineering
Master of Science: Engineering & Technology Innovation Management
Relevant Coursework: Introduction to Machine Learning, Interactive Data Science, Product Management, Financial Analysis for Managers, Business Marketing & Strategy, Strategy & Management of Technical Innovation, Quantitative Entrepreneurship
Cumulative GPA: 3.75/4.00

Ganpat University, U.V. Patel College of Engineering, Gujarat, India **May 2022**

Bachelor of Technology: Biomedical Engineering
First Class with Distinction, Cumulative GPA: 9.82/10.00

EXPERIENCE

Business Development & Licensing Intern, Centre for Technology Transfer & Enterprise Creation, CMU **May 2023 – Present**

- Market Strategy: Accelerated movement of research & technology from CMU to market by conducting comprehensive literature searches and in-depth market analysis. Strategically identified commercialization opportunities and devised impactful marketing materials and communication strategies to facilitate transfer of technology.
- Technology Evaluation: Executed a systematic review of 25+ patent portfolios, assessing each technology's commercial viability. Employed a categorization approach to prioritize patent cases, resulting in data-driven recommendations for retaining patents based on intrinsic value and potential impact.

Graduate Research Assistant, Computational Engineering & Robotics Lab, CMU **Aug 2022 – Aug 2023**

- Developed a comprehensive product development roadmap for designed foot insole and performed a thorough comparative analysis against competing products, enabling a soft launch of created insole within local medical practices.
- Collaborated with a team of 4 to design & develop a functionally graded lattice insole using additive manufacturing for mitigating localized plantar pressure for diabetic foot ulcers.
- Optimized silicone-based custom fit mask design for ALS patients through skin elasticity and thickness testing to prevent leakage and enhance user comfort.

Research Engineer, Maritime Research Center, India **Oct 2020 – Feb 2022**

- Designed and implemented an automated health hazard analysis tool for divers, utilizing Indian Ocean Region acoustic ecology to generate health hazard reports and noise maps to monitor underwater acoustic levels, aiding in safe dive site selection and acoustic protective equipment decisions.
- Led diverse research, including surveys, data analysis, and a thorough hyperbaric medicine literature review in collaboration with medical experts.

PROJECTS

Generative AI Implementation & Impact Analysis, Capstone Project, PPG Industries, Inc. **Aug 2023 – Present**

- Researching, designing, and proposing Generative AI solutions for PPG, delivering insights into potential efficiency gains, cost savings, and growth opportunities.
- Applying innovation management principles to ideate and execute innovative strategies, while conducting extensive primary and secondary research to benchmark Generative AI implementation in diverse job functions within PPG.
- Developing change management strategies to facilitate the adoption of cutting-edge computer science technologies within PPG, addressing corporate culture shifts and fostering acceptance of advanced AI solutions.

Analysis for New Technology Commercialization, Carnegie Mellon University **Jan 2023 – May 2023**

- Assessing economic viability of commercializing haptic gloves for virtual reality. Strategizing recommendations for product process decisions such as manufacturing location, implementing automation & supplier choices via sensitivity analysis.
- Created a virtual model of the manufacturing facility to optimize mass production of the technology, including estimating production costs, identifying cost drivers, and proposing opportunities for cost reduction and process improvement.
- Led the development and execution of a choice-based conjoint survey targeting potential customers, enabling precise estimation of demand and identification of key demand drivers.

SKILLS

Technical Languages: Python, Pandas, Numpy, SciKit Learn, Altair, Git, SQL, R, MATLAB/GNU Octave, G dataflow, Perl for Bioinformatics, C/C++, Clinical/Diagnostic coding
Software/Tools: Streamlit**,** Simulink, NI Multisim, Keil uVision, Proteus, AutoCAD, SolidWorks, Materialise Mimics Innovation Suite, Jira, Balsamiq, Tableau, LabVIEW, Fusion 360, 3D Slicer

PUBLICATIONS

- **Kapadia, A**., Prabhuraman, S. and Das, A. (2020) *Health Hazard Analysis Tool for Safe Diving Practices based on the Acoustic Ecology of the Indian Ocean Region.* Presented at OCEANS 2022, Chennai, India.
  DOI: https://doi.org/10.1109/OCEANSChennai45887.2022.9775220