http://linkedin.com/in/varshashankar
https://vshanks.github.io/

# Varsha Shankar
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## HIGHLIGHTS

- Product Management
- Strategic & Detailed thinker
- Machine Learning

- Network Science
- Data Science & Analysis
- Published Researcher

- Canadian Space Society
- Python, R, Mongo, SQL, Linux
- AWS, Jira, Invision

## EMPLOYMENT EXPERIENCE

**Data Science Advisor**                                  Toronto, Canada
Spaced Ventures                                          Jul 2020 – Current

- **Strategic planning** and defining roadmap for spaced base, a tool to visualize and analyze market data in space VC
- **Advising on data** management and modelling strategies for mining and interpretation of space sector data

**Director, Product Innovation**                          Toronto, Canada
Receptiviti                                              Jan 2020 – Current
*Startup • Delivering phycological metrics from natural language*

- **Creating and transforming product ideas** by prototyping product features and experimental methods in machine learning, network science while managing their transformation into product
- **Managing end-to-end lifecycle** of flagship product from product and data strategy to execution and launch
- **Formulated and prototyped** network model of collaboration metrics resulting in new product offering within 2 months

**Technical Product Manager**                             Jun 2018 – Jan 2020

- **Created product roadmap and execution strategy** for 5 product launches while championing voice of customer
- **Managed engineering delivery** for $1M contract over 9-month development lifecycle
- **Derived and automated** computation of 70% more accurate team productivity metrics ensuring timely project delivery

**Product Management Intern**                             Ottawa, Canada
IBM, Extreme Blue Internship, Watson Analytics           May – Aug 2017

- **Managed team** of developers for concept-to-pitch of new product in Watson Analytics Business Intelligence software using natural language processing to discover novel data sources

**Data Scientist**                                        Bangalore, India
GadflyZone India                                         Mar 2016 – Jul 2016
*Startup • Data Science driven Strategic Consulting firm in Chemicals*

- **Conceived technology and data strategy** within firm as technical right hand to founder and implemented back-end tech stack
- **Architected and designed machine learning** capabilities to generate strategic and market positioning recommendations with efficiency improvements of 90% and accuracy increase of 50%

**Senior Data Science Engineer**                          Apr 2015 – Mar 2016

- **Innovated and designed** 5 context-based recommendation engines featured as core competency in client reviews
- **Designed skills assessment** package for technical recruiting and grew team to 2x as member of senior interview team

**Researcher**                                            Philadelphia, USA
University of Pennsylvania                                Aug 2013 – Mar 2015

- Conducted research on brain connectivity analysis and community detection in autism spectrum disorder with MEG and DTI data and co-authored 3 conference papers

**Research Assistant**                                    Sep 2012 – Aug 2013

- Implemented machine learning head detection with predictive gaze estimates using Kinect RGBD streams; Designed recording facility and conducted video data collection exercise for over 300 participants

**Additional Experience**

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|---|---|
| Summer Intern, Neuromorphics Lab, Boston University | May 2012 – Aug 2012 |
| Senior Software Engineer, Yahoo! India | 2009 - 2011 |

## VOLUNTEER WORK

| | |
|---|---|
| MMAARS – Research Contributor | Oct 2020 – Current |
| Spaced Ventures – Data science advisor | Jul 2020 – Current |
| Habitat Marte Space Analogue Mission – Participant & invited researcher | Jun 2020 – Sep 2020 |
| Canadian Space Society – Society development manager | Oct 2019 – Current |

## EDUCATION

**MBA**                                                                                                  Toronto, Canada
Rotman School of Management, University of Toronto                                        2018
- **Academic**: Dean's List, GPA 3.78/4.0, GMAT 780/800
- **Creative destruction lab**: Co-founded space robotics company
- **Teaching Scholar** for >70 students in Statistics, Intro to finance, Data modelling and Managerial accounting
- **Notable Projects:** Sustainability strategy for BASF Canada, Predictive model for carbon scope emissions for Corporate Knights

**Master of Science in Engineering, Robotics**                                      Philadelphia, USA
University of Pennsylvania                                                                                2013
- **Academic**: GPA 3.97/4.0
- **Teaching Assistant** for > 120 students in Psychology department for Introduction to Cognitive Science
- **Notable Projects:** RASC-AL Robo-ops challenge 2012, Temporal dynamics of core periphery structure, 2D SLAM, 3D UKF orientation tracking, Autonomous robot hockey team, Finger flexion prediction from EEG

**Bachelor of Engineering, Computer Engineering**                              New Delhi, India
Delhi Technological University                                                                         2009

## AWARDS & LEADERSHIP

| | |
|---|---|
| Rotman Lisa Hamann Award 2017 | 2nd place at Rotman Sustainability Innovation 2017 |
| Rotman Scholar Award 2017 | 2nd place at Rotman Venture Capital Case Competition 2016 |
| Rotman Roger L. Martin Entrance Scholarship 2016 | 1st place at Rotman Entrepreneurship Strategy 2016 |
| Vice President Rotman Net Impact 2017-2018 | Delhi Technological University Gold Medal Winner 2009 |

## SELECTED PUBLICATIONS

- Ghanbari, Yasser, Bloy, L., Tunc, B., **Shankar, V.**, et al. "On characterizing population commonalities and subject variations in brain networks." Medical image analysis 38 (2017): 215-229.
- Tunç, Birkan, **Shankar, V.**, et al. "Towards a quantified network portrait of a population." International Conference on Information Processing in Medical Imaging. Springer, Cham, 2015.
- **Shankar, Varsha**, et al. "A co-robotic assistant capable of object selection and search via a brain machine interface." 2013 6th International IEEE/EMBS Conference on Neural Engineering (NER). IEEE, 2013.