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

Varsha Shankar
shankarvarsha3@gmail.com

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, Spark

EMPLOYMENT EXPERIENCE

Director of Product and Data　　　　　　　　　　　　　Jan 2020 – Current
Receptiviti　　　　　　　　　　　　　　　　　　　　　　Toronto, Canada
Startup • Delivering psychological metrics from natural language

- **Managing end-to-end lifecycle** of 4 enterprise and B2C2B products including data strategy from conception to launch
- **Led machine learning data pipeline** creation using Spark and Drill resulting in creation of company wide data hub, testing speedup of 93% and reduced data accessibility bottleneck
- **Created network science prototypes** of employee collaboration resulting in new product offering within 2 months

Technical Product Manager　　　　　　　　　　　　　Jun 2018 – Jan 2020

- **Managed product** from discovery to launch with team of 8 engineers, 3 data scientists, 1 designer and 4 executives
- **Managed product and engineering delivery** for enterprise contract over 9-month development lifecycle
- **Derived and automated** computation of 70% more accurate team productivity metrics ensuring timely project delivery

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

- **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　　　　　　　　　　　　　　　　　　Mar 2016 – Jul 2016
GadflyZone India　　　　　　　　　　　　　　　　　　Bangalore, India
Startup • Data-driven strategic consulting firm in chemicals sector

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

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

VOLUNTEER WORK

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 2018
Rotman School of Management, University of Toronto Toronto, Canada
- **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 modeling 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 2013
University of Pennsylvania Philadelphia, USA
- **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 2009
Delhi Technological University New Delhi, India

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

- **Shankar, V.,** Rezende, J., Tejaswi K., & Ghazanfarinia S. (2020). Concept of a launch centre on Mars considering self-sustaining issues. 23rd Annual International Mars Society Convention.
- Ghanbari, Y., Bloy, L., Tunc, B., **Shankar, V.,** Roberts, T. P., Edgar, J. C., ... & Verma, R. (2017). On characterizing population commonalities and subject variations in brain networks. Medical image analysis, 38, 215-229.
- Tunç, B., **Shankar, V.,** Parker, D., Schultz, R. T., & Verma, R. (2015, June). Towards a quantified network portrait of a population. In International Conference on Information Processing in Medical Imaging (pp. 650-661). Springer, Cham.
- **Shankar, V.,** Sherbakov, L., Galbraith, B., Sohail, A., Livitz, G., Gorchetchnikov, A., ... & Versace, M. (2013, November). A co-robotic assistant capable of object selection and search via a brain machine interface. In 2013 6th International IEEE/EMBS Conference on Neural Engineering (NER) (pp. 1441-1444). IEEE.