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

EMPLOYMENT EXPERIENCE

 Director, Product Innovation Receptiviti Jan 2020 – Current Toronto, Canada

Startup • Delivering psychological metrics from natural language

- Transforming experimental methods in machine learning and network science into product ideas through mvp implementation and managing their transformation into production software
- Managing data pipeline creation on Spark to ingest and featurize ~600GB natural language data
- 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

IBM, Extreme Blue Internship, Watson Analytics

May – Aug 2017 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
 GadflyZone India

Mar 2016 – Jul 2016

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 Senior Software Engineer, Yahoo! India May 2012 – Aug 2012 2009 - 2011

VOLUNTEER WORK

Spaced Ventures – Data science advisor Habitat Marte Space Analogue Mission – Participant & invited researcher Canadian Space Society – Society development manager Jul 2020 – Current Jun 2020 – Sep 2020 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 University of Pennsylvania

Philadelphia, USA

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

2009

New Delhi, India

Delhi Technological University

AWARDS & LEADERSHIP

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