Sri Vallabha Deevi

Lead Data Scientist, Tiger Analytics

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Experience

Tiger Analytics   *Chennai, India*
Lead Data Scientist   *Jan 2018 - present*

- Full truck load freight **cost prediction** for a US 3PL company. Solution in use since 2020 and improved margins and conversion rates.
- Industrial safety compliance monitoring using **Deep Learning**. Alerting violations of PPE equipment usage and unauthorized entries.
- Marketing channel efficiency measurement using **Multi Touch Attribution** and **Market Mix Modeling** for a US wine retailer.
- **Recommendation System** for email marketing and **Propensity Modeling** for in-store coupon delivery for the same retailer.
- Equipment failure prediction via **Anomaly Detection** using IoT sensor data for the largest steel company in India.
- Process control using **Reinforcement Learning** for optimal product properties, for the same steel company.
- Attribution modeling - in store product placement effectiveness, production activities driving energy consumption.
- **AB testing** of product features, conversion propensity modeling for an anti-virus software company.
- Warehouse inventory management using **Reinforcement Learning** for a US consumer food company.
- **Hypothesis testing** to relate sales patterns and margins for a national beverage distributor in the US.
- **Speaker** at AI,ML Conferences - **ODSC APAC 2020, Cypher 2019, Data Hack Summit 2018**.
- **Team building** - mentoring data science teams, interviews for candidate selection.

Indian Institute of Technology Madras   *Chennai, India*
Senior Scientist   *Aug 2015 - Dec 2017*

- Statistical analysis of experimental data from sprays - **Time Series Modeling, Extreme Value Analysis, Conditional Probability**.
- Modeling breakup mechanisms of liquid droplets using Population Balance Model and Euler-Euler formulation of two phase flow.

Emmeskay Systems   *Chennai, India*
Engineer   *Apr 2008 - Jun 2009*

- Mathematical modeling of automotive systems for concept evaluation and **control strategy development**.
- Design of **Hybrid Electric Tricycle** with manual and electric propulsion.

Deloitte Consulting   *Hyderabad, India*
Business Analyst   *Jul 2007 - Mar 2008*

- MS Excel based model to improve profit margins for 1500 SKUs across nine geographies of a safety consumables company in the US.

Education

Indian Institute of Science   *Bangalore, India*
Doctor of Philosophy in Aerospace Engineering   *Jul 2009 - Jul 2015*

- Computational study of fuel spray evaporation in gas turbine engine using **High Performance Scientific Computing**.
- Developed a 3D **Parallel Computing** code in **FORTRAN** to calculate properties of continuous phase, and Lagrangian tracking for droplets.
- Established the usage of **Explicit Filtering Large Eddy Simulation** for predicting dilute multi phase flows.

Indian Institute of Technology Madras   *Chennai, India*
Bachelor of Technology in Mechanical Engineering, CGPA: 9.14/10   *Jul 2003 - Jun 2007*

- Finished in **top 5** in a class of **110**, with focus on Thermal Engineering and Minor in **Marketing Management**.
- Andhra Pradesh Chief Minister's **Pratibha Award Gold Medal** for outstanding performance (top 0.4%) in IIT-JEE 2003.

Skills

Languages	Python, R, SQL, PySpark, CUDA, C, C++, FORTRAN
Engineering	MATLAB, OpenFOAM, Scilab, Octave, Fluent, AutoCAD, ParaView
Assorted	TensorFlow, PyTorch, Linux, git, LaTeX, CFD, Statistics, Robotics
Learning	Data Camp profile: `https://www.datacamp.com/profile/srivallabhad`

Accomplishments

Industry Expert, Board of Studies

- Vellore Institute of Technology (VIT), Chennai. (2018 -)
- G.H. Raisoni College of Engineering, Nagpur. (2018 -)
- SRM University, Chennai. (2019 -)
- Loyola Institute of Business Administration, Chennai. (2020 -)
- Galgotias University, Noida. (2020 -)

Certifications

- Heterogeneous Parallel Programming (CUDA) - Coursera.
- Machine Learning by Andrew NG, Coursera.
- Mining Massive Data Sets - Stanford.
- Data Scientist with Python, Data Scientist with R - Data Camp.

Scholastic Achievements

- GRE: **1370**/1600 {Quant: 800/800, Verbal: 570/800, AWA: 4/6} in Sep 2008
- TOEFL: **113**/120 Read: 30/30, Listen: 30/30, Speak: 24/30, Write: 29/30 in Sep 2008.
- All India Ranks **773** in IIT-JEE 2003 and **652** in AIEEE 2003.
- State Ranks **810** in EAMCET 2003 and **19** in AIEEE B-Arch. 2003.

Academic Publications

- Shapes of splattered drops. Langmuir, 2017, 33 (18).
- Spatio-temporal microstructure of sprays: data science-based analysis and modelling. Journal of Fluid Mechanics, 912, A19.
- Large Eddy Simulation of evaporating spray jets. Paper No: GT2015-43306, Montreal, Canada.
- Drop size distribution effects in intersecting sprays. ILASS-Asia 2016, Chennai, India.
- Large Eddy Simulation of particle laden flows. ILASS-Asia 2016, Chennai, India.
- Identifying non-Markov effects in sprays. ILASS-Asia 2016, Chennai, India.
- Shapes of randomly placed drops. APS-DFD 2016, Portland, USA.
- Non-Markov effects in intersecting sprays. APS-DFD 2016, Portland, USA.

Co-curricular Activities

- Coordinator, Student's Council, IISc *2011 - 2012*.
- Creative Contributor, Telugu Samithi, IISc *2010 - 2011*.
- Associate, Janaagraha Center for Citizenship and Democracy *2008 - 2009*.
- Coordinator, National Service Scheme, IIT Madras *2004 - 2007*.
- Coordinator, MECHANICA, IIT Madras *2006*.
- Contributor, Campus Magazines, IIT Madras *2005 - 2006*.