

Srivatsava Daruru

Synopsis

Machine Learning leader with a proven track record of delivering scalable AI and NLP solutions across startups and top tech firms. Recognized for driving innovation end-to-end, with multiple patents, publications, and award-winning products..

Education

- 2008–2010 **Master of Science (Thesis) in Computer Science**, *University of Texas at Austin, Austin*.
C.G.P.A **3.83**
- 2004–2008 **Bachelor of Technology (Hons) in Computer Science and Engineering**, *International Institute of Information Technology, Hyderabad*.
C.G.P.A **9.06**

Publications and Talks

- Srivatsava D., Sankari D., Gunjan G., Ilian I., Weijia X., Paul N., Marin N., Joydeep G., "Distributed, Scalable Clustering for Detecting Halos in Terascale Astronomy Datasets", ICDM Workshops 2010: 138-147
- Srivatsava D., Marin N., Walker M., Joydeep G., "Pervasive Parallelism in Data Mining: Dataow solution to Co-clustering Large and Sparse Netix Data" , Proceedings of the 15th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining, Paris, 2009
- "Churn Baby Churn: Fast Scoring on Large Telecom Dataset", Talk at Predictive Analytics World (PAW 2009), Washington D.C., 2009

Patents

- Fact Validation in Document Editors, PatentNo: 20190361961
- Natural Language Processing Systems and Methods, PatentNo: 20190103111
- Method for Filtering and Semi-Automatically Labeling Training Data, PatentNo: 20250028910A1

Work Experience

Senior Manager
ML

ServiceNow, February 2020–Present

Led all RAG (Retrieval-Augmented Generation) science—including search, question answering, post-training LLM optimization, and agentic workflows—for ServiceNow's Virtual Agent, shaping the company's conversational AI strategy. Spearheaded Genius Q&A (ServiceNow's first GenAI application), and built largest internal QA benchmark (10K+ pairs). Delivered production-grade NER models and co-architected the first python ML pipeline, enabling scalable, modular ML across teams. Previously pioneered deep learning on a Java-based platform, launching first transformer based models that improved intent classification by 10%+ and enabled multilingual BERT support across six languages. This innovation accelerated deep learning deployment by 6+ months ahead of Python infrastructure and earned praise from CPO CJ Desai.

Lead NLP Engineer (Relevance)	<p>PassageAI, February 2018-February 2020.</p> <p>One of the first NLU engineers to join PassageAI and was actively involved in setting the NLU direction with CTO. PassageAI was acquired by Servicenow.</p> <p>Designed and built the following systems: Named Entity Recognition, Slot Filling, Knowledge base relevance and ranking, end to end L2 Ranker system that constantly improves with user feedback. Awarded Patent for our work.</p> <p>Direct interaction with clients to understand, brainstorm and design new features to streamline all relevance requirements and instrumental in customer success in a couple of clients. Helped establish coding standards and engineering of our micro-services for low latency and memory footprint.</p>
Software Development Engineer II	<p>Microsoft, August 2012- February 2018.</p> <p>One of the few developers to build Bing Product Ads content API from scratch. Worked on all levels of the stack. It currently has around 50 million offers.</p> <p>Worked on various components of Bing Knowledge Graph including scaling different parts of data pipeline, designing and implementing Rest APIs to showcase end to end capabilities while collaborating with teams in China and India.</p> <p>Designed and built a new algorithm to automatically conflate different sources of truth like wikipedia, IMDB, independent wikis and knowledge bases. This fixed a significant number of duplicates in our knowledge graph.</p> <p>Ideated, designed and developed patent (404123-US-NP) pending technology to bring intelligence to office products. This won the company wide yearly hackathon in 2016. It covers different scenarios from auto-filling in MS word and excel to fact validation in ms word and outlook. This is now released as a part of the office suite.</p>
Research Scientist	<p>Adometry, November 2010-August 2012.</p> <p>Worked on devising, developing and testing of new approaches to improve current fraud detection and ad-analytics products. Was involved in leading/assisting in all stages of client process (from on-boarding to the delivery of results).</p> <p>One of the first research engineers and involved in developing research strategy. Adometry was acquired by Google.</p>
Software Developer	<p>Vertive, May 2010-Oct 2010.</p> <p>Designed and built tools to analyze large amounts of data and automatic alerts for stale offers.</p>
Intern	<p>Kosmix, Summer 2009.</p> <p>Developed an automatic taxonomy generation technique for diverse structured content (eg. dbpedia etc.) available on the web.</p>
Graduate Research Assistant	<p>IDEAL Laboratory, Fall 2008, Spring 2009, Fall 2009.</p> <p>Implemented a Parallel co-clustering algorithm for data-ow framework to predict unknown ratings on Large and Sparse Netflix Data. Accepted for publication in ACM SIGKDD'09 with results having very good scale-up and speed-up</p> <p>Developed a fast, parallel feature selection and classification system for large, noisy telecommunications dataset for KDD-CUP 2009 Challenge. Accepted for a talk at Predictive Analytics World2009.</p> <p>Worked on a parallel dataflow solution to discover dense structures in a large astronomy dataset. This automatic detection of dense regions is particularly useful to aid in the visualization and analysis of the N-body simulation with millions to billions of stars. Selected for publication in ICDM workshop.</p>

Achievements

- Won company wide and AI group hackathon in Microsoft for the year 2016 from around 3500+ teams.
- Rank **6** in a undergraduate class of 120.
- Awarded the Pratibha Scholarship for being in the top 0.33 percent of those who took the All India Engineering Entrance Examination(AIEEE)-2004.
- Merit certificate for being topper in CBSE board examination 2004.
- XV Science Talent Search Examination by United Council, AIR 28, 2000.