akashjaswal.github.io

SUMMARY

- Strong track record of applying ML end-to-end from defining the problem, scraping, crowdsourcing & annotating the right data, research state-of-the-art techniques/models to solve the problem, and shipping production-ready ML systems.
- Classification, regression, unsupervised learning problems on large / small / imbalanced / structured / unstructured datasets.
- Collaborate with engineering, product management, and business stakeholders to ship impactful consumer & enterprise features.
- Technical: Python, R, SQL, Hive, Spark, Docker, Kubernetes, Tableau, ML frameworks (Sklearn, Tensorflow, Keras, Pytorch).

WORK EXPERIENCE

Petuum Inc, Sunnyvale, CA – Senior Software Engineer (NLP)

Aug '19 - Present

- Architecting and implementing high-quality NLP models for multi-lingual structured/unstructured question answering.
- Reduced training time by 75x (from 8 hours to 4 minutes), improved accuracy by 20pp, scaled model serving and inference for concurrent usage and reduced infrastructure costs substantially.
- Lead, mentor and grow the ML engineering team to encourage innovation and implementation of state-of-the-art models.

SAP Labs, Conversational AI, Palo Alto, CA – ML Engineer

March '17 - Aug '19

- End to end applied research, development, and deployment of machine learning models in the conversational AI domain.
- Projects include natural language understanding models for intent recognition, entity extraction, coreference resolution, closed domain question & answering on structured/unstructured text, and information retrieval systems.
- Communicating and collaborating with the product team, business stakeholders and engineers to ship features on the platform.
- Shipped features in production: Demo link pronoun resolution for dialog context management, text augmentation as a service.

Concur, Seattle, WA – Product Data Science Intern

June '16 - March '17

- Built models to predict customer churn and proactively mitigate risks leading to \$5M in estimated lifetime revenue earnings.
- Partnered with the product team to identify key strategic focus areas for new feature development using NLP.
- Automated an end-to-end data pipeline for data extraction, preprocessing, mining, prediction and data visualization.

Google Inc., Hyderabad, India – Associate Account Strategist

May '14 - Aug '15

- Identified effective targeting and segmentation strategies for ad campaigns to maximize ROI for the customer.
- Developed dashboards and tools to provide insights for cross-functional partners to support data-driven decision making.

Google Inc., Hyderabad, India – SMB Intern

May '13 - July '13

Developed robust metrics to inform strategy and measure the incremental impact of Ad campaigns.

EDUCATION

University of Washington, Information School, Seattle, WA

June '17

Master of Science in Information Management -- Specialization in Data Science & ML. Relevant Coursework: Data Science, Machine Learning & Econometrics, Advance Data Visualization, Information Architecture, Data Ethics and privacy, Applied Social Statistics.

Osmania University, Hyderabad, India

June '14

B.S. Computer Science and Engineering -- Relevant Coursework: Data Structures, Software Engineering, Database Management Systems, Artificial Intelligence, Data Mining, Information Security, Information Storage, and Management

ACADEMIC RESEARCH PROJECTS

Data for Economic Development - Improving access to Financial Institutions based on Mobile Cellular Data in Ghana (2016)

- Worked as a Research Assistant for Prof. Joshua Blumenstock to crunch terabyte-scale Call Detail Records data using Spark.
- Cleaning, anonymizing and visualizing data for enabling analysis of the socio-economic behavior of the population.

Healthcare Cost and Utilization Project (HCUP) - Fixed Effects Econometrics (2016)

- Worked with Prof. Benjamin Althouse on modeling relationships between vaccination uptake and hospitalization for WA state.
- Built fixed effects model in R for gauging the impact of vaccination within counties normalizing for demographic characteristics.