

KRITI GOYAL

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📍 Madison, USA

Seeking Summer 2022 internship

Education

University of Wisconsin-Madison

Master's of Science, Computer and Information Sciences

Coursework: Advanced Deep Learning*, Machine Learning*, Big Data systems*

Sep 2021 - Dec 2022

Madison, USA

Birla Institute of Technology and Science, Pilani

Bachelor of Engineering (Hons.), Computer Science

Coursework: Information Retrieval, Artificial Intelligence, Data Mining, Data Structures & Algorithms

Aug 2015 - Jan 2019

Hyderabad, India

Experience

Apple

Machine Learning Engineer, Customer Systems

- Implemented FastText model to improve retrieval of articles in the component-issue search used by AppleCare advisors.
- POCed text-to-speech module for Apple's support guides using AWS Polly to improve accessibility for customers with reading and learning disabilities.

Software Engineer, Global Business Intelligence

- Redesigned Apple retail's big data analytics pipelines to make them schema-less, migrated from Teradata to separate the compute(Spark) and storage(AWS S3) to scale them independently which led to a 90% reduction in operational costs.
- Created dashboards to serve the reporting needs for three business areas: Retail finance, Retail store, and Retail apps.

Amazon

Software Development Engineer – Intern, Consumer Behaviour Analytics

- Worked alongside research scientists in transforming their research work to a large-scale, automated, production-grade Machine Learning Attribution model.
- This model guides the apportionment of Amazon's budget of over \$10 billion on various advertising media.
- Single-handedly implemented the snapshot creation and featurization modules to process over a billion records per day and scale to handle spikes in traffic - during sales and holiday seasons.
- Optimized the machine learning pipeline to reduce the model's execution time by 75%.

Software Development Engineer - Intern, Automated Advertising

- Implemented a logger plugin to aggregate and write Amazon's ads performance data from Facebook, Twitter, Pinterest, and other vendors in S3.
- Increased customer trust by bringing in transparency to the anomaly data by creating a user-friendly dashboard for marketing managers. This also helped simplify workflows and reduce the application's tickets.

Technical Skills

Languages: Python (ML & Statistical libraries), C++, Scala, C, Java (JUnit, Spring, Mockito), SQL, HTML/CSS

Technologies/Frameworks: AWS (S3, EC2, EMR, DynamoDB, SWF), Spark, GitHub

Projects

Abstractive Summarization model

- Used graph-based approach for abstractive summarization on Twitter data based on Opinosis paper- Ganesan K. et al.
- Generated summaries proved to be similar > 40% times when benchmarked against human-written summaries.

Information Retrieval system

- Designed a search engine based on Boolean and Vector Space model on MovieLens dataset.
- Document name indexing → Tokenization → Normalization → Indexing → Runtime query processing → Retrieval

Achievements

Best Innovation Award, Govt. of India Of 64 nationwide finalists in the Smart India Hackathon.

ACM-ICPC, Baylor University, Texas Ranked 2 out of 54 college teams. Competed in Amritapuri regionals.

Kishore Vaigyanik Protsahan Yojana (KVPY) Top 0.2%- All India Rank 246 from over 135,000 candidates.

National Talent Search Examination (NTSE) Top 0.05%- All India Rank in the top 500 from over 800,000 candidates.