

# Div Dasani

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## SKILLS

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**Languages:** Python (NumPy, Pandas, Flask), SQL, Scala/PySpark, Java, TensorFlow

**Tools:** Databricks (Apache Spark, Delta Lake), AWS (SageMaker, Redis, EC2, ECS, S3)

**Domain Expertise:** Recommendations, Ranking, Personalization, Causal Inference

## WORK EXPERIENCE

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### Scribd

*Machine Learning Engineer- Recommendations*

San Francisco, CA  
March 2020 – Present

- Bringing user personalization to Scribd using self-attention based sequence models with transformer encoders
- Upgraded recommendations batch training jobs from Spark 1 to Spark 2, decreasing compute utilization by 10%

### Facebook

*Data Science Intern- Infrastructure*

Seattle, WA  
September 2019 – November 2019

- Created model to estimate CPU utilization of Facebook live video transcoding requests using encoded parameters
- Developed dynamic slotting dispatcher to allocate compute resources to requests, increasing server efficiency by 35%

### Roku

*Software Engineering Intern- Recommendations*

Los Gatos, CA  
June 2019 – August 2019

- Built *More Like This* feature for The Roku Channel, which uses matrix factorization to personalize recommendations
- Employed Spark and AWS Redis to build data pipelines, capable of handling user requests with <10ms latency

## TECHNICAL PROJECTS

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### xterns.com ([link](#))

October 2018 – March 2019

- Developed a platform to connect diverse, talented students to top employers through externships
- Built backend using Flask and SQL, constructed internal analytics platform, and conducted A/B testing for the site.

### Image Colorization Algorithm ([link](#))

January 2019 – March 2019

- Developed a convolutional neural network capable of colorizing grayscale images realistically
- Presented research to technical and nontechnical audiences at annual Northwestern research exposition ([abstract](#))

### Recommendation Algorithm ([link](#))

March 2019 – March 2019

- Built a recommender system with implicit feedback data from Instacart using a collaborative filtering algorithm
- Programmed the mean percentile ranking metric and employed it to test the accuracy of the algorithm

## EDUCATION

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**Northwestern University**, McCormick School of Engineering

*Master of Science in Electrical Engineering*

*Bachelor of Arts in Statistics, Mathematical Methods in the Social Sciences*

Evanston, IL  
September 2016 – March 2020  
September 2016 – March 2020

**Harvard Business School**

*Summer Venture in Management Program*

Cambridge, MA  
June 2018 – June 2018