Shruti Patel

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EXPERIENCE

Capital One

Senior Machine Learning Engineer — *June 2021 – Present*
- Architected and developed a library to fine-tune SBert models, increasing search accuracy from 69% to 91%.
- Led a team of interns to create an OCR library.
- Led a project to create a covid vaccine card parser to support the re-opening of company offices.

Tech Lead — *Feb 2018 – Jan 2020*
- Architected and led the team to gradually move data from a 3rd party legacy application into a microservice; thus, giving power to the users to update and reference the data in question.
- Refactored and optimized microservice so the API response times improved 200%.
- Helped raise engineering standards within the line of business (LOB) by implementing engineering best practices within the team (e.g. CI/CD), mentoring early career software engineers, and helping interview new talent.

Senior Software Engineer — *Nov 2017 – May 2021*
- Architected and developed parts of a daily-run data pipeline helping save Capital One millions of dollars.
- Saved the company over $1 million per year in AWS costs by rearchitecting the code and infrastructure.
- Created a POC to classify emails using decision trees.
- Built and maintained automated web scrapers to scrape email and webpage data.
- Developed and inner-sourced code for spinning up a Spark cluster with a mock AWS S3 service to enable faster Spark integration tests.

Notch *(Acquired by Capital One)*

Data Engineer — *Mar 2017 – Oct 2017*
- Created a Spark job to migrate over $9 trillion worth of Capital One spend and rewards data from their mainframe system to S3, MongoDB, and Cansandra in the cloud.

Data Scientist — *Feb 2017 – Apr 2017*
- Created multiple machine learning models using supervised learning on Salesforce data.

Lead Engineer — *Nov 2015 – Feb 2017*
- Collaborated with a team of designers, product managers, and product owners to create a machine learning based health and wellness app that grew the startup client's valuation to $10 million.
- Architected and created platform to hand-groom decision trees that also solved the cold start problem.

Maxx Potential

Lead Engineer — *July 2014 – Aug 2015*
- Led a team of developers to create web/iOS/android apps for a Brazilian peer-to-peer money transfer platform.
- Architected, created, and maintained a RESTful API for internal consumption by android and iOS apps the supporting the AWS infrastructure and CI/CD pipeline.

Analytics Analyst — *May 2014 – July 2014*
- Implemented Google Analytics event tracking and A/B testing for Medstar group of hospitals and its affiliates.

RESEARCH

Monarch Butterfly Conservation | *Lead Author* — *June 2020 – Present*
- Collaborated with a team of researchers from Emory, Stanford, and Vanderbilt to train a deep neural network (unet) to predict the number of butterflies in images of monarch butterfly clusters.
- Analyzed the model predictions of the test images.
- Debugged and fixed the model and training pipeline.

VOLUNTEER

Kennedy Children's Center | *Board of Directors* — *Sept 2020 – Present*
Jersey City Council | *Data Consultant* — *May 2020 – Sept 2021*
Hoboken Volunteer Ambulance Corps | *EMT-B* — *Aug 2019 – Present*

AWARDS

Upmarket Recognition Champion | *Capital One* — *Jan 2021*
Ace Award | *Capital One* — *June 2018*
Technology Builder | *Margret Lyn McDermind Award* — *Oct 2015*

EDUCATION

University of Virgina

Bachelor of Science in Aerospace Engineering — *Aug 2009 – May 2013*

TECHNICAL SKILLS

Languages: Java, Python, SQL, Golang, PHP, Dart, Swift, JavaScript, HTML/CSS, dotnet, R
Frameworks: Spark, Tensorflow, Java Spring, Cucumber, Drools, Hugo, Laravel, Flask, Django, Flutter, React Native
Developer Tools: AWS, Git, Docker, Jenkins, Linux, Terminal/CLI, Postgres, MongoDB, Cassandra, Kafka, Redis
Other: monolith to microservice migrations, data migrations, jira and agile project management,