# Hersh Patel

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#### Experience

# Amazon · Software Engineer - IoT SiteWise Monitor · August 2019 - Present

- Founding team member; Collaborated with 8 others to launch public preview (re:Invent 2019) and GA (July 2020)
- Designed and developed a global microservice to charge our customers per unique active user per month
- Led a team of 4 to implement an AWS IAM based authentication mechanism for the service's manged applications
- ► Wrote 9 of the 24 back-end REST APIs in Go and their respective integration tests
- · Awarded the Above & Beyond award at the AWS IoT Analytics all-hands for work done on the billing service

# Amazon · Software Engineering Intern - Virtual Dash Buttons · May 2018 - August 2018

- Built a pipeline to display smart labels for 1.4B+ virtual dash buttons with AWS DynamoDB and Spring MVC
- Expanded the virtual dash core service by developing Java APIs to translate data between internal microservices
- Designed an A/B test to evaluate potential growth in customer conversion rate for the top 100 replenishable products

#### Bloomberg · Market Data Summer Analyst - Energy & Commodites · June 2017 - August 2017

- ► Built a document classification program with Python's Natural Language Kit to extract data from 150+ page reports
- Redesigned the power data API with Python's Beautiful Soup according to 8 client's recommendations

#### NBCUniversal · Data Analytics Intern - Big Data · June 2016 - August 2016

- Leveraged customer purchase KPIs, with SQL, to propose a 40% increase in Fandango's user retention rate
- Engineered a high throughput data pipeline with AWS Kinesis and Hadoop to handle over 2TB data per day

# Rutgers Department of Computer Science • Teaching Assistant • January 2018 - Fall 2018

- ► Fall 2018 Foundations of Business Programming (136:388)
- ► Spring 2018 Intro to Discrete Structures 2 (198:206)

#### Activites

# BAPS Charities · Regional Youth Activities Volunteer · September 2011 - Present

▶ Plan, oversee, and speak at regional summer camps and weekly assemblies for 3k+ children with team of 12 members

# **TEDxRutgers** • *President* • *Tech Director* • December 2015 - May 2019

- Achieved 90% growth (~500 to ~1k members) over one year by identifying attendance trends in member data
- Led team of 20 (Design, Marketing, Tech, Finance, Logistics) to host conferences with 1k+ attendees and 10 speakers

# Smart Cities · Independent Study - Professor Desheng Zhang · January 2018 - January 2019

- ▶ Researched the feasibility of real-time sharing of sensor data within heterogeneous vehicular networks
- \* Analyzed spatio-temporal granularities of human mobility patterns in Shenzhen, Chain to predict mobility uniqueness

#### Education

# Rutgers University - New Brunswick • May 2019

Bachelors of Science in **Computer Science** and **Economics** 

GPA: **3.83/4.00** 

Relevant Coursework: Grad Artificial Intelligence (520) • Grad Pattern Recognition (535) • Algorithms (344)
Systems Programming (214) • Databases (336) • Distributed Systems (417) • Game Theory (482) • Smart Cities (494)

# Skills & Interests

*Programming:* Go • Python • Java • SQL • HTML • CSS • JavaScript

*Tools*: AWS (API Gateway, CloudFormation, CloudWatch, DynamoDB, IAM, IoT, KMS, Kinesis, Lambda, Route53, SES, SNS, SQS, SSO, Step Functions, X-Ray) • Git • Bloomberg Terminal

Interests: Traveling • Running • Photography • Volunteering • Bhangra & Bollywood Music