# Hersh Patel

patel.hersh@rutgers.edu • 732 853 3885 • www.hershpatel.com • Seattle, WA

#### Experience

#### Amazon Web Services (AWS) · Software Engineer I/II - IoT SiteWise Monitor · August 2019 - Present

- Founding member; Implemented 10 of 22 serverless REST APIs in Go and achieved 99.99% availability since GA
- Collaborated with product managers and principal engineers to design an AWS IAM based authN mechanism which unblocked 5+ enterprise customers and our product launch in China; Led a team of 4 to implement the feature
- Designed and developed a microservice to bill customers per unique active user per month globally
- 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 writing 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 • September 2015 - 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