

SHAHIL PATEL

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WORK EXPERIENCE

Epic Games | *Go, Python, AWS, Snowflake, Terraform, GitHub Actions, Docker/Kubernetes, Grafana* **May 2023 – Present**
Software Engineer

- Built an internal Full-Stack Okta Application that provides multiple teams with an easy way to query Snowflake data for use in legal matter creations, streamlining the process by 47% while using Golang, AWS, Terraform, React, and Docker/Kubernetes
- Developed a Snowflake database abstraction layer module as part of an internal Golang library that provides 9+ teams and over 100+ employees with a way to seamlessly integrate Snowflake into internal tools, automation, and projects with minimal code
- Created an internal service that automatically updates Splunk lookup tables with current AWS Stewards data for 3+ teams and over 16+ employees using Go, Python, GitHub Actions, Terraform, and AWS while on the Application Engineering team

Rutgers University – New Brunswick | *Python, AWS, PyTorch, Flask, Dash* **September 2022 – December 2023**
Machine Learning Researcher

- Retrained multiple custom YOLOv5 models using PyTorch, hyper-parameter tuning, dataset splitting, scaling, and classifier training reducing the models' false positive rate on average by 15% and false negative rate by 19% in 3 different object classes
- Expanded upon a Python webapp that generates geolocal and trespassing visualizations, optimizing calculation/display delay by 21% and improve rendering efficiency by 16% while using Flask, Dash, and trespassing data for 5+ researchers
- Built CI/CD pipelines for edge servers on a fleet of 20+ trains as well as for various frontend websites and dashboards, streamlining the process for updating multiple services using AWS CodeBuild, CodeDeploy, and CodePipeline

Merck & Co. | *Python, AWS, Dataiku, R, Figma, Various statistic libraries, Proprietary technologies* **May 2022 – August 2022**
Software Engineer Intern

- Automated the calculation of KPIs in Dataiku for international agricultural facilities using lasso quantile regression, forward stepwise regression, and LQMM for use in web dashboards, reducing calculation and analysis time by 22%
- Designed a comprehensive React web dashboard with multiple visualizations to display and simulate agricultural KPI data for clients using data generated in Dataiku and stored in AWS S3 buckets for 200+ clients across the world
- Collaborated with 3+ teams while on Merck's Animal Health Precision Technology Group to work on a multi-year project which utilized agricultural and transactional data for various international clients in an Agile work environment

Raymond James Financial | *Python, IEX, Excel/VBA, Proprietary technologies* **May 2021 - August 2021**
Technology Analyst Intern

- Developed an automation to algorithmically rank the Dow 30's best dividend securities using Excel VBA, Python, and the IEX API
- Automated the rebalancing of client portfolios using Python and Excel VBA increasing rebalancing speed by 90%
- Algorithmically collected data about potential clients to facilitate 52% faster client outreach using Python and various libraries

PROJECTS

RUPlatePal (Rutgers Hackathon 2023 Best Rutgers Hack Winner) | *Python, Typescript/React, Google APIs* **February 2023**

- Serves as the bridge between RU Dining Halls and RU Food Banks by automatically managing leftover food data
- Project utilizes a TypeScript and React frontend, Python backend, Google Sheets API, and Spoonacular API
- Specifically worked on Python backend and API integration portions of the project

Athena (Rutgers Hackathon 2022 Google Cloud Category Winner) | *Python, Google Cloud, NLTK, Tkinter* **April 2022**

- Uses a modified SMMRY algorithm to find n most important sentence from a lecture/educational video
- Python project that utilizes Google Cloud Speech to Text, gcloud CLI, NLP (powered by NLTK), and Tkinter for UI
- Specifically worked on the Google Cloud Speech to Text, NLP and UI portions of the project

EDUCATION & DEVELOPMENT

Rutgers University – New Brunswick: B.S in Computer Science

GPA/Rank: 4.0/4.0 (Cumulative and Major), 1st/6318

Relevant Courses: Distributed Systems, Software Methodology, Internet Technology, Regression Methods, Data Structures

SKILLS

Programming Languages: Python, Go, Java, C#, C, R, Web (JavaScript/TypeScript/HTML/CSS)

Frameworks/Technologies: Git, REST, Terraform, PyTest, React, Matplotlib, Flask, Unity, Dataiku, Android Studio, JSON

Developer Tools: AWS, TeamCity, Grafana, Splunk, GitHub, GitHub Actions, BitBucket, Jira, Figma, Docker/Kubernetes

PERSONAL INTERESTS

Languages: English, Swedish (Intermediate level), and proficient in Gujarati

Travel: Love to try new foods from all around the world and have been to 28+ countries