

# SAI PRANITH KASAM

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## EDUCATION

<b>The University of Texas at Dallas</b>	Bachelor of Science, Computer Science Overall GPA: 3.9 Dean's List (10%)	May 2024
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## EXPERIENCE

**Prudential Financial, Inc.** – *AWS Cloud Engineering Intern*; Newark, NJ May 2022 – August 2022

- Created a testing framework for AWS network routes spanning multiple AWS accounts, VPCs, and Transit Gateways (TGWs), allowing greater confidence within the Engineering and SRE teams when implementing network changes within AWS
- Utilized various Python libraries (boto3, threading) to interface with AWS's TGW network route analyzer API to verify connectivity between AWS VPCs and regions
- Implemented a queuing mechanism to handle multi-threaded API calls to AWS in order to parallelize the workload while avoiding throttling limits on AWS, allowing the program to run twice as fast
- Test results were generated and stored in human and machine-readable formats, allowing for the operations teams to build automation against the data sets to correct failed test scenarios automatically

**Sandbox Systems LLC** – *Software Engineer Intern*; Austin, TX June 2021 – August 2021

- Small Startup, worked on a cross-platform web app called "Ping"
- Implemented location, calendar, and contact permissions on the IOS and Android platforms using XCode & Android Studio
- Utilized Angular & Ionic frameworks to Implement a feature disabling editing an event 10 minutes before an event starts

**Sai Baba Hindu Temple** – *Software Developer*; Austin, TX May 2020 – August 2020

- Built a Java program that increased the accuracy of detecting an expired subscription member
- Provides data for whose subscription is still active and whose isn't in excel format using Java Excel and Apache APIs
- Sent a text using Twilio to the members whose subscription was about to expire

## PERSONAL PROJECTS

### Python Web Scraping/Automation

- Hacker News: Uses the BeautifulSoup module to scrape Hacker News and email me the top 10 posts with over 100 votes.
- NYU Daily Screener: Used Selenium to automate filling a daily screener form every day
  - Both projects ran automatically every day using the Cron job utility
- Built a simple web server using Flask that received form data and stored it in a database

### Python Scripting

- Twitter Bot: Created a Twitter Bot (Tweepy) that sends me a text (Twilio) every time it sees the word "giveaway" in my feed. Hosted on an EC2 instance on AWS to update every 5 minutes.
- Password Secure: Uses the pwnedpassword.com API to locally check whether a password has ever appeared in a data leak or not. Uses K anonymity and receives a list of possible matches to ensure the API never knows our full password.

### Data Science

- Plotted the average age and the net wins of Korean baseball pitching data to see if there is a correlation between them
- Used Bokeh to create interactive scatterplots to easily visualize the data
- Also used: Jupyter Notebooks, NumPy, Pandas, and Seaborn

### Machine Learning

- Used the K Nearest Neighbor Classifier to create a model that recognizes the specific type of an Iris flower
- Used the scikit-learn module to split the data into test and training sets and test the accuracy of the model

### Artificial Intelligence

- Used TensorFlow, Keras, imageAI, and the EfficientNetV2L model to create a simple image recognition app

### Simple Web Development Portfolio – <https://saikasam-portfolio.netlify.app>

- RoboFriends: Built a fully responsive website using React, JSX, JSON, NPM, HTML, JavaScript, CSS; deployed to GitHub pages
- Background Generator: Allows web developers to create custom gradient backgrounds and paste them into their projects