Thien Tran

ttran384@gatech.edu | (346)-204-9381 | /thienlongtran.com | /thienlongtran | /thienlongtran

Education

University of New Orleans August 2019 - December 2021
Bachelor of Science in Computer Science - GPA: 3.99/4.00 *New Orleans, LA*

Skills

Languages	Python, Java, Go, HTML, CSS, JavaScript, SQL
Technologies	Git, REST APIs, Unity, Jupyter Notebook
DevOps	Amazon Web Services (AWS), Terraform, GitHub Actions
Certifications	AWS Solutions Architect - Associate, AWS Cloud Practitioner

Experience

PayPal May 2022 - Present
Software Engineer Intern *Austin, TX*

- Improved fault-tolerance of synthetic testing systems of 4 classes of self-hosted GitHub Actions runners by creating a failure recovery script using Python and GitHub APIs that detects and recovers workflow scheduling failures.
- Enabled 24/7 reliability of GitHub Actions synthetic tests by deploying the failure recovery script to AWS Lambda using Terraform which triggers every 5 minutes, recovers up to 25 failures a day, and only costs $0.57 a month.
- Provided better infrastructure observability by designing and developing a scalable, high performance web service using Gin/GoLang, Docker, AWS Elastic Kubernetes Service, and AWS ElastiCache Redis which processes GitHub webhooks and delivers 5 key metrics about workflow jobs currently running across Venmo's 1200+ repositories.

USAA May 2021 - July 2021
Software Engineer Intern *Plano, TX*

- Reduced cluttering of a qTest archive by 84% and allowed for easier feature-based auditing by designing a new directory structure for publishing automated infrastructure test results that affected 70 projects.
- Enabled automatic AWS resource tagging on one parameter if not provided by a developer or optional manual tagging otherwise by modifying a custom Terraform provider utilized by 55 projects using GoLang.
- Decreased the cost of conducting network connectivity testing on AWS EC2 instances by 92.38% by developing a selection of 5 AWS Systems Manager (SSM) testing automations using Bash, Terraform, and GitLab CI/CD.

University of New Orleans January 2021 - May 2021
Undergraduate Research Assistant *New Orleans, LA*

- Developed immersive eXtended Reality (XR) games using Unity and C# under advisement of Dr. Farjana Eishita to discreetly detect 8 types of cognitive distortions and other mental health conditions.
- Converted 42 scenes of an existing cognitive distortion detection game manually from Augmented Reality (AR) to Mixed and Virtual Reality (MR & VR) for player-experience (PX) comparisons between platforms.
- Conducted moderated PX testing on 9 individuals to identify bugs and ensure effective game-play engagement.

Projects

Stocks Simple Moving Average | *Python, Amazon Web Services*

- Built an AWS pipeline that computes the Simple Moving Average (SMA) of historical OHLC-type stocks.
- Created the cloud infrastructure using the AWS Python SDK (Boto3) to automatically initialize and connect two S3 buckets, two Lambda functions, one SNS topic, and one DynamoDB NoSQL database table.
- Decreased the time it takes to acquire the SMA of an input file by 99.87% compared to manual calculation.

Warframe Inventory Market Info | *Python*

- Developed a program that automatically gathers 4 different economic attributes about users' in-game Warframe inventory items, saving users about 52 seconds of work per item page compared to manual calculation.
- Generated a list of users' inventory items using OpenCV to isolate item names from the inventory-screen image by thresholding the text colors, and using PyTesseract to read and save the remaining text.
- Enabled better investment decisions and comparisons by collecting the average currency price of the 10 current cheapest live web market value sell-orders using the warframe.market API for each item in users' inventory.