

# TARUN CHAND ILLAPU

Harrison, New Jersey

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## SUMMARY

Innovative and results-driven DevOps Engineer with extensive experience in designing and maintaining robust CI/CD pipelines, implementing automation, and provisioning infrastructure on both private and public cloud platforms. Certified AWS Cloud Practitioner with a proven track record of optimizing software development processes and ensuring seamless deployment. Adept at leading agile methodologies and leveraging cutting-edge technologies to drive project success. Actively seeking challenging DevOps Cloud Engineer roles to apply expertise in cloud architecture, CI/CD, and automation to drive organizational growth and innovation

## EDUCATION

### New Jersey Institute of Technology

Aug 2022 - May 2024

MS in Computer Science

GPA 3.55

**Courses:** Internet & Higher Layer Protocols, Operating Systems, Machine-Learning, Data Management System Design, Data Analytics with R Programming, Data Mining

### Vignan's Institute of Information and Technology

Aug 2018 - May 2021

Bachelors of Technology in Computer Science

GPA 3.25

**Courses:** Data Structures, Advance Data Structures, Design & Analysis of Algorithms, Cloud Computing, Database Management Systems, Computer Networking, Machine Learning, Artificial Intelligence, Big Data Analytics

## TOOLS & TECHNOLOGIES

|                            |  |
|----------------------------|--|
| Languages:                 | Python, Shell Scripting, Bash, R, SQL, HTML, CSS   |
| Cloud services:            | Amazon Web Services, Microsoft Azure   |
| Version Control:           | GIT, GITLAB, GITHUB  |
| Infrastructure Automation: | Terraform Enterprise, Cloud Formation  |
| Configuration tools:       | Ansible, Docker, Kubernetes, Terraform   |
| CI/CD:                     | Jenkins, Gitlab CI, GitHub Actions   |
| Containers:                | Docker   |
| Monitoring tools:          | Cloud Watch, Splunk  |
| Scripting:                 | Shell Scripting, YAML, Python(Boto3)   |
| Databases:                 | MySql, NoSql, Oracel, MongoDB  |
| Operating Systems:         | UNIX, Linux, Windows   |
| SDLC:                      | WaterFall model, Agile, Scrum  |
| Libraries:                 | Boto3, TesorFlow, Numpy, Keras   |
| AWS Services:              | EKS, ECR, ECS, EC2, S3, ELB, VPC, Route53, Lambda, IAM, Cloud Formation, Cloud Trail, Cloud Watch, Cloud Front, DynamoDB, EBS, Code Pipeline, Code Commit, Code Deploy, Code Build |

## PROFESSIONAL EXPERIENCE

### DevOps Engineer

Aug 2021 - July 2022

HashTek Solutions

- Created and implemented **groundbreaking Infrastructure as Code (IaC) methodologies** using Terraform and CloudFormation, resulting in a **25% decrease in infrastructure provisioning time**.
- Engineered and **optimized CI/CD pipelines** with GitLab CI and Jenkins, achieving a **30% reduction in deployment time** and a **20% increase** in deployment frequency.
- Implemented **Infrastructure as Code (IaC) methodologies** with Terraform and CloudFormation, leading to a **25% decrease in infrastructure provisioning time**.
- Spearheaded containerization initiatives using Docker and Kubernetes, achieving a **40% improvement in scalability** and a **monthly server cost reduction by \$15,000**.
- Executed regular **performance tuning** and **optimization of cloud resources**, ensuring **99.99% uptime** and **optimal resource utilization**.
- Imparted technical expertise and mentorship to junior team members, fostering a culture of continuous learning and improvement.

## Cloud Support Associate – 1

Feb 2021 - July 2021

HashTek Solutions

- Collaborated with development and operations teams to establish best practices for **Software Development Lifecycle (SDLC) automation**, resulting in a **50% faster time-to-market**.
- Assisted a **10-member software development team in debugging** approximately three software programs weekly.
- Provided technical support and troubleshooting for **cloud-related issues**, maintaining a **95% customer satisfaction rating**.
- Utilized **AWS CloudWatch** and other **monitoring tools** to proactively identify and resolve **performance bottlenecks**, ensuring **optimal performance** of **cloud-based applications**.
- Assisted in the development and implementation of disaster recovery strategies, ensuring **99.99% data availability** in the event of system failures.
- Acted as a liaison between customers and engineering teams, effectively communicating **technical solutions** and ensuring **customer success**.
- Demonstrated **good hands-on experience** in EC2, VPC, S3, IAM, RDS, CloudFormation (YAML), CloudWatch, ELB, CloudTrail, LAMBDA Services, AWS EKS & AWS ECS.

## Cloud Support Associate Intern

Nov 2020 - Feb 2021

HashTek Solutions

- Gained **hands-on experience in cloud technologies**, assisting in resolving **complex customer problems** and supporting **cloud infrastructure**.
- Participated in the **implementation of cloud infrastructure solutions**, supporting the **deployment of 10+ cloud-based projects**.
- Developed and maintained technical documentation and knowledge base articles, empowering customers to troubleshoot **common issues independently**.
- Collaborated with **senior engineers to design and implement security best practices**, ensuring **compliance with industry standards and regulations**.

## RESEARCH PUBLICATIONS

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### A comparative study on construction of 3D objects using 2D images - SMART-DSC 2021

June 2020 - Feb 2021

- 4th International Conference on Smart Technologies in Data Science and Communication (Smart-DSC 2021) - Springer
- Reviewed various existing methods for generating 3D representations from 2D images, proposing a novel approach for the construction of 3D models from existing 2D images using GAN

## ACADEMIC PROJECTS

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- **AWS Cloud Optimization – Identifying Stale Resources:**
  - Developed a Python script as an **AWS Lambda** function utilizing **Boto3** for effective **EBS snapshots management**
  - Implemented the script for identifying and deleting unused snapshots to optimize costs
  - Integrated the solution with CloudWatch Events for automated periodic execution, ensuring efficient storage and reduced expenses
- **University Blog:**
  - Engineered a **Full-Stack Blog**, serving as a **Social-Media Application** for university representation
  - Developed using frameworks such as **Django, Bootstrap, Social-Auth(Google, Twitter, and Github API's)**, and **Azure Cloud Storage** for efficient data handling also Implemented **2-Factor Authentication** for enhanced security
  - Tailored functionalities for sharing events, workshops, announcements and multimedia
- **A Menu-Driven Data-Base Application:**
  - Created a comprehensive **Menu-Driven Library database system** using **MySQL** and **Java**
  - Designed to provide a user-friendly interface for efficient data management within the database
  - Incorporated a range of features to enhance usability and accessibility

## CERTIFICATIONS

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- AWS Cloud Practitioner ( CLF-C02 ) – Certified ( Credential ID : [RC6WR5CBQEBQ15KJ](#) )
- The Joy of Computing using Python – National Program on Technology Enhanced Learning (NPTEL)
- Data Base Management System- National Program on Technology Enhanced Learning (NPTEL)

## ACHIEVEMENTS / LEADERSHIP

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- **Representative for Computer Science Department** in the Graduate Student Association at NJIT
- **Student Associate** in Strategic Events and Conference Services at NJIT
- Organized a 24hour National Wide Hackathon as a part of **ACM 2019** and Coordinator for Vignan Technical Fest 2020 associated with GitHub, Microsoft Student Partner, Code-Chef and Open Student Community