



Bhargavi Poyekar

in /bhargavi-poyekar ✉ bpoyeka1@umbc.edu 📞 Mobile: +1 6674640096 📍 Edison, NJ, USA

CORE COMPETENCIES

- Competent in coding, testing and debugging. Noteworthy abilities include:
 - Ansible and Terraform** for automation of infrastructure deployment and management. 🔗
 - Python** Distributed System for Car booking. 🔗
 - Flask** API for calculating points from a receipt using **Docker** environment and **Github Actions**. 🔗
- Certified as **AWS DVA-C02**, **AWS CLF-C02**, and **Terraform Associate (003)**.
- Proficiency in **Javascript, Ajax, MySQL, Linux, and Git** for full stack development and version control.
- Knowledge of **SDLC** with experience in **Agile and Test-Driven Development (TDD)**.
- Exceptional communication, interpersonal & analytical problem solving skills.

PROFESSIONAL EXPERIENCE

Cloud Engineer, University of Maryland Baltimore County

Aug 2024 - Present

- Automated provisioning of isolated virtual lab environments for university courses using **Terraform** and **vCenter**, enabling rapid deployment of multi-VM setups with segmented **internal, external, and DMZ networks**.
- Integrated **Ansible** for post-deployment configuration of lab VMs with course-specific tools (e.g., Nginx, Wireshark), supporting hands-on learning in Networking and Cybersecurity classes.
- Improved scalability and consistency by designing reusable **Terraform modules** and Ansible playbooks, reducing manual setup time by **90%** and supporting 50+ concurrent student labs per semester.

Platform Engineer (Cloud) Intern, University of Maryland Baltimore County

Jun 2023 - May 2024

- Automated the deployment, configuration, and management of **50 Linux virtual machines (VMs)** using **Ansible** and Python scripts, integrating **SSH hardening, key-based authentication, and jump hosts** for secure remote access.
- Developed a **secure Django-based VM management platform**, implementing **role-based access control (RBAC)**, **SSL/TLS encryption**, and **secure session management** to prevent unauthorized access.
- Implemented **Ansible Vault** for secure credential storage, encrypting sensitive data and ensuring controlled access for over 100 students and faculty using the VM infrastructure.

Software Developer, Origin Cloud Tech

Jun 2020 - May 2022

- Developed a **scalable and modular** LMS platform using Laravel MVC, improving **user engagement by 2%** for 10K+ monthly users. Strengthened system security with **OAuth2** and **multi-factor authentication**, and integrated **REST APIs** for payments (PayPal, Razorpay), geolocation, and Zoom, boosting website efficiency by **40%**.
- Built a **responsive and accessible** UI with **HTML5, CSS3, Bootstrap, and JavaScript**, reducing bounce rates by 15% via loading feedback (skeleton screens, spinners). Managed deployments via CI/CD pipelines (GitHub Actions).
- Designed a database architecture with **normalized tables, multi-table joins**, and optimized **SQL CRUD** queries, reducing query execution time by **10%**. Wrote automated tests using **PHPUnit** to ensure data integrity.
- Mentored 2 junior developers** in code reviews and Laravel best practices, accelerating feature delivery by 20%.

PROJECTS

HDFS to S3 Secure Data Transfer Application (Python, Hadoop, AWS):

- Developed a **Python** application to automate file transfers from **Hadoop HDFS** to **AWS S3**, reducing manual data handling time by 50%. Implemented **IAM Role policies, STS AssumeRole for temporary security credentials, and client-side encryption**. Enhanced security by using **AWS SSM Parameter Store** to store sensitive credentials, replacing environment variables.
- Integrated **Amazon CloudWatch** to monitor file transfers, track errors, and log performance metrics. Configured **Amazon SNS** to send email notifications for transfer status updates (success/failure).
- Tech:** HDFS, S3 Bucket, IAM Roles, Python, boto3, GIT, Linux, CloudWatch, SNS, STS, SSM.

Flask API for Receipt Processing (Containerized, Scalable Deployment, SOLID Principles):

- Developed a **Flask-based API** for calculating reward points, using **Docker** to ensure consistency across environments.
- Implemented **API testing** using **Postman**, automating tests for different API endpoints. Integrated continuous testing into **GitHub Actions** for automated deployment and validation.
- Tech:** Python, Flask, JSON, Docker, Docker Compose, Postman, GitHub Actions, Pytest.

Token Manager (Replication, Atomic Semantics, Fail Silent model, Object Oriented Design):

- Developed a **multi-threaded client-server** application for token management with (1, N) replication.
- Deployed a resilient **read-impose-write-all** protocol, ensuring accurate maintenance of token state information and fail silent behavior for server nodes resulting in a 95% up time.
- Tech:** Golang, gRPC, Google Protocol Buffer, SHA-256, socket programming, Mutex, Multithreading.

TECHNICAL SKILLS

Languages and Databases: Python, Java, C/C++, PHP, Go, JavaScript, SQL, HTML, CSS, MySQL, SQLite, MongoDB.
Frameworks: Django, Django-Rest, Laravel, Selenium, Node.js, React, Flutter, Android Studio, Scikit, TensorFlow.
DevOps and Cloud: Ansible, Terraform, AWS, Docker, Kubernetes, EC2, S3, Lambda, IAM, VPC, Route53, Vault.
Others: GIT, Linux, VSCode, Pytest, Matplotlib, Tableau, jQuery, Pandas, Numpy, Rest API, Ajax, Postman.

EDUCATION

University of Maryland, Baltimore County - Baltimore, MD | MS in Computer Science | GPA: 3.85/4.0
Sardar Patel Institute of Technology, Mumbai, India | B.Tech in Computer Engineering | GPA: 9.4/10

Aug 2022 - May 2024
Aug 2018 - May 2022