

WORK EXPERIENCE

Senior Product Engineer - ██████████

Jul 2021 – Jul 2023

- **Product Owner, Chaos Engineering of ██████████ a Chaos Engineering and Full-Stack Monitoring tool**
 - Designed a unique framework to inject agentless Chaos attacks in Linux servers after testing multiple proof of concepts
 - Engineered 10+ agentless open-source Chaos injection with Python and Shell for Linux Servers using stress-ng
 - Utilized OpenTelemetry instrumentation to proactively identify & resolve performance bottlenecks, integrating metrics analysis with resilience testing for enhanced system robustness, ensuring operation under demanding scenarios
 - Built the Python backend framework to inject and abort Chaos attacks using Flask RESTful APIs
 - Added real-time server health monitoring feature with Prometheus and Grafana to observe and analyze server reliability ensuring compliance with SLOs and SLAs defined by stakeholders
 - Executed PoCs and integrated Chaos Engineering support for Kubernetes based applications using Chaos Mesh
- **Spearheaded product implementation for clients and internal Canvas projects**
 - Used Python Scripting to bulk onboard client servers across all product environments, improving efficiency by 90%
 - Automated the installation and configuration of product dependencies across 250+ servers with Python & Shell
 - Deployed 15+ product environments on Linux servers and tested client applications while maintaining 99% uptime
 - Successfully delivered 6 concurrent implementations under challenging conditions and varying client needs
- **Built the entire automation testing pipeline with Selenium and Jenkins**
 - Created, deployed and maintained JMeter Scripts & Jenkins Pipeline for automation testing, reducing 95% manual work
 - Collaborated with 3 other Canvas product teams and helped them setup their own automation testing pipeline
 - Responsible for entire automation testing Jenkins pipeline across all Canvas Environments

Full Stack Developer Intern - ██████████

May 2020 – Aug 2020

- Led a team of 3 developers to build and customize ██████████ reports for 10+ clients
- Built features using Puppeteer library, NodeJS, JavaScript, HTML and CSS to enhance the smart reports
- Customized smart reports as per client requirements and generated over 22,300Eur/2,000,000INR in revenue

EDUCATION

MSc Computer Science, Future Networked Systems - Trinity College Dublin

Sept 2023 – Sept 2024

- Courses: Advanced Software Engineering, Distributed Systems, Scalable Computing, Next Generation Networks
- Graduated with 1:1 - First Class Honours
- Member of Dublin University Computer Science Society (DUCSS)
- **Projects**
 - Designed and implemented a resilient distributed system architecture using AWS, Oracle Cloud, MySQL Group Replication, Docker, Kubernetes, Terraform and Python Flask, achieving <250ms response time with global synchronous replication. Enhanced monitoring and observability with OpenTelemetry and Signoz. Ensured high availability and fault tolerance through health checks and failover mechanisms across multiple regions.
 - Developed a Building Management System Dashboard using Prometheus, Grafana, Python, InfluxDB and Nginx which optimizes infrastructure metrics digestion, actuation and monitoring for enhanced observability.

B.E Chemical Engineering - Birla Institute of Technology and Science, Pilani

Aug 2017 – May 2021

- Achieved 1:1 First Class; 7.70 CGPA
- Achieved proficiency in engineering principles, analytical thinking and structured problem-solving

ACHIEVEMENTS, CERTIFICATIONS & SKILLS

E3 (Engineering, Environment and Emerging Technologies) Scholar - Trinity College Dublin

Sep 2023

- Received €5000 scholarship for sustainability-focused CS research, specializing in containerization and cloud computing, an award granted to only a select few postgraduate students across Trinity College

Gremlin Certified Enterprise Chaos Engineering Certification - GECE

Jan 2024

- Specializing in ensuring system resiliency & fault tolerance via safe experimentation & effective blast radius management

SKILLS: Debugging, Quick Learning, Adaptable

EXPERTISE: System Resilience, Automation, Observability