

# SIMRAT PAL SINGH SATIA

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## Education

**Netaji Subhas Institute of Technology (NSIT), University of Delhi**

**New Delhi, India**

*Bachelor of Engineering (First Class) in Computer Engineering, GPA: 8.1/10*

*Aug 2015 – Aug 2019*

- *Relevant Coursework:* Data Structures and Algorithms, Artificial intelligence, Operating systems, Database systems, Networking systems, Calculus, Linear Algebra.
- *Research and Patent Award* with grant of Rs 10k to distinguished researchers

## Experience

**Microsoft India Development Center (IDC)**

**Hyderabad, India**

*Software Engineer II (Level: 62) - Azure Linux Team*

*Aug 2022 - Present*

*Software Engineer I (Level: 59-60), II (Level: 61)*

*Jul 2019 - Aug 2022*

**RedHat on Azure (1M+ VM Cores on Azure / Red Hat Update Infrastructure (RHUI))**

- **Developed and maintained products** for building Azure RedHat VM images
- **Vertical scaling** of infrastructure, leading to **950% improvement** in repository operations, with over 60% reduction in the incident (ticket) load, saving over 1500+ hours annually
- **Spearheaded the project** of onboarding ARM64 SKU, integrating the build pipeline and customization of image -link
- **Designed and implemented** extensible OS agnostic Azure Keyvault Certificate-rotation service, increasing reliability
- **Mentored and onboarded** an undergrad to build client package and improve monitoring

**Azure Hybrid Benefit for BYOS (License Management - link)**

- **E2E ownership** of design, scalable development of AHB in-vm service and VM extension, bug-bash/testing and customer journey/onboarding, allowing conversion from BYOS to PAYG VM model
- Collaborated with billing, commerce, CELA (Legal), Microsoft Partners (RedHat/SUSE), spearheaded partnership between **30+ stakeholders** to develop and announce Global Availability (GA)

**Geneva Monitoring (Cloud Service Telemetry Platform)**

- Integrated all Azlinux project services with monitoring platform with insightful dashboards, monitors and alerts
- Conducted a **session with 50+ engineers** Azure Compute wide as **SME** on monitoring

**UIAutomationTool (Web Experience Automation)**

- E2E ownership of **design and implementation** of extensible automation tool offering the capability to perform e2e testing of any website's user-interface by means of test cases auto-generated using a yaml spec file and inbuilt ej5 template

**Load Simulation (Stress Testing and Benchmark Tool)**

- Contributed to **design and development** for stress testing of linux VMs across CPU, Disk and Memory utilization
- **Mentored undergrad intern** to create wrapper and extend for AzQualify team, culminating with her PPO

**Workload Builder (On-Prem Workload Migration Tool)**

- Complete **ownership of UX design, development** and CI/CD deployment of workload builder UI on Azure Portal
- Mentored undergrad intern on UI development for Project X, culminating with his PPO from Microsoft

## Awards/Recognition

- **Top 4/526** in **Microsoft Hackathon 2022** for Self-Serve Image Validation in Azure Quality Segment
- **Microsoft Cultural Award: Customer Obsession** Remove barriers to customer satisfaction
- **Azlinux Security Champ** Ensuring security fundamentals of service
- **Microsoft Cultural Award: One Microsoft** For boundary-less collaboration and contribution across teams

## Publications

- Aggarwal, S., Gupta, S., **Satia, S. P. S.**, Saluja, S., Gambhir, V. (2022). Predict Smartphone Addiction Through Usage Pattern of Installed Android Applications, derive Correlations with Addiction. Journal on Addictions, 9(1), 63-74.
- Aggarwal, S., Saluja, S., Gambhir, V., Gupta, S., **Satia, S. P. S.** (2020). Predicting likelihood of psychological disorders in PUBG players using supervised machine learning. Addictive behaviors, 101, 106132.
- **Satia, S. P. S.**, Miglani, V., Gambhir, V. (2019). Teacher Attrition Prediction Model and Analysis of the Associated Factors. International Conference on Computing, Power and Communication Technologies(pp. 458-462). IEEE.

## Technical Skills

**Languages:** Java, Golang, C-Sharp, Python, Typescript, Shell Scripting, Powershell, Latex

**Technical skills:** Cloud Computing (Azure), Ansible Automation, NodeJS, Mocha, Puppeteer, Virtualization, Linux, Scalable Web Development, Agile Development, AzDevops, CI/CD, Data Structures and Algorithms

**Interests:** Classical Singing (3 Year Prayag Certified), Guitar (ig: midnight\_euphonies), Reading/Writing (Managing Editor, Alliance - NSIT's Newspaper), Theatre (Ashwamedh - DramSoc, NSIT)