

Ramneek Chhatwal

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EDUCATION

Georgia Institute of Technology

Aug 2025

Master of Science in Computer Science

Specialization in Computing Systems

Clemson University

Dec 2021

Bachelor of Science in Computer Science (Previously Computer Engineering, B.S.)

Mathematics Minor

WORK EXPERIENCE

JP Morgan Chase

Charlotte, NC

Site Reliability Engineer III

Dec 2023 – Present

- Maintained application SLOs above 99.8% uptime
- Standardized incident management practices and built an escalation matrix to streamline response and reduce MTTR to under 30 minutes.
- Led SR/DR testing to validate recovery times of ~1.5 hours, strengthening disaster recovery readiness.
- Drove application cost reduction savings of \$561K against a \$608K target for 2025.
- Consolidated 88 deployment pipelines into 2, cutting deployment time by 4+ hours per release.
- Migrated to Dynatrace, decommissioning legacy AppDynamics/APICA monitoring.
- Built unified Grafana dashboards aggregating metrics from APICA, Kafka, DB, and Kubernetes.
- Implemented infrastructure automation and Just-In-Time access to reduce privileged access events from 26 per year to zero.
- Improved SRE coverage from 8x5 → 16x5 through cross-training and documentation.
- Reduced monthly Kubernetes pod cost for key apps from \$12.8K → \$4.5K, increasing resource utilization from 29% → 62%.
- Stood up performance environment and testing for upstream/downstream application testing.

Ally Financial

Charlotte, NC

Cloud Site Reliability Engineer

Jan 2022 – Dec 2023

- Developed Python script to allow for automatic code deployments to reduce deployment time by ~1hr each deployment.
- Developed Python script and Terraform code to template monitoring services based on industry recommendations for all application teams to use.
- Pioneered a SplunkDB Connect connection with our MySQL Aurora databases to allow use to further monitor our instances using Splunk.
- Update engine version and clean-up RDS instances to eliminate ~\$60,000 per year in cost.
- Created a monitoring framework for Snowflake errors with AWS using SNS, lambda, and Python.
- Championed an enterprise-wide Site Reliability Engineering community of practice.
- Developed Terraform code for a POC of a project management system fully hosted in AWS for our Early Talent bootcamp
- Created Ansible script that performs automated health checks every 4 hours on the Oracle DB's that are used in production.
- Created monitors and alerts in Datadog and Splunk that have been used in triaging production incidents for the cloud instances of our deposits flow.
- Inherited and further developed a sentiment analysis algorithm that processes VOCs (Voice of Customers) and sends daily snapshots.
- Facilitate and govern IAM role provisioning in our cloud production environment for all our application teams which includes updating Terraform code and strict requirements elicitation to ensure the principle of least privilege.

Windstream Communications

Greenville, SC

IP Engineering Intern

May 2021 – Aug 2021

- Developed Python script to alert and create a JIRA ticket when a Windstream serviced market fell below an available IP threshold, eliminating the possibility of a stale market
- Developed Python script to web scrape IP metrics for all Windstream markets and store in InfluxDB
- Visualized overall summary and individual IP metrics for all Windstream markets using Grafana
- Developed Python script to compile a list of the CIDR representation of free IP space available to be distributed to other markets
- Researched and initiated automation projects that were pitched to Windstream executives to continue development on

Itron, Inc. (3 Co-op rotations)

West Union, SC

Product Management and Network Development Intern

Jan 2019 – Aug 2020

- Developed an integration between an Amazon Echo and an Itron meter through a Raspberry Pi; created code in Python and the Bluetooth wireless protocol to connect the Raspberry Pi to the Amazon Echo; used previous code written in C and the Zigbee wireless protocol between the meter and the Raspberry Pi
- Tested meters by completing sniffer traces on Zigbee connectivity to valid devices and sending synthetic loads
- Worked on creating a REST API that optimized Bluetooth and Zigbee wireless protocols to transmit metrology data
- Travelled to Canada to help analyze and fix manufacturing issues on ~140,000 new meters to be deployed
- Managed all cloud devices and delegated on-site engineers to fix connectivity issues on pilot program to place ~120 Zigbee routers in homes to transmit data to cloud
- Designed and prototyped hardware to allow ConEd NY to comply with new grid safety and National Electric Code protocols; created a technical document on installation, parts, and suppliers

PROJECTS

Alternakraft – Developed and designed an end-to-end application to simulate data aggregation regarding households in the United States, specifically around alternative power sources and other household properties. Built front end using Flask, middleware with Python, and backend using MySQL RDMS.

Clemson Makerspace x AWS – Captstone Project – Developed, designed, and integrated a sign-in and management system for the Clemson Makerspace into a single system for a fast and robust user experience. Built using AWS tools and Python for the backend, with an Angular driven frontend and overseen by AWS software engineers.

Website Portfolio – Written in React.js with a Bootstrap template, created project to showcase a more detailed form of personal resume, along with links to all projects.

UNDERGRADUATE RESEARCH AND LEADERSHIP– CREATIVE INQUIRY

Injured Military Veteran Adaptive Sport and Paralympic Soccer Program Development

Jan 2018 – Dec 2021

- Objective 1: Provide adaptive sport activities coupled with community support and leadership services to Veterans with Disabilities and injured members of the Armed Forces
- Objective 2: Establish a Paralympic Soccer Team at Clemson and assist in the United States Paralympic Soccer Team
- Completed Mental Health First Aid and Adaptive Sport Certifications.

SKILLS

Programming Languages: Python, C++, C, Java, React.js, YAML, JSON, R, HTML5, CSS, MATLAB, x86 Assembly

Methodologies and Protocols: CI/CD, Kanban, AWS Well-Architected Framework, Agile Methodologies, MVC, UML, Zigbee Wireless Protocol, REST API, Kafka

Infrastructure: Kubernetes, AWS

Tools: Terraform, Git, Ansible, Bitbucket, Gitlab, GitHub, Visual Studio Code, Splunk, Datadog, Vim, Azure DevOps, Jira, Confluence, GitHub Actions, InfluxDB, Grafana, Replit, SQLite3, Oracle SQL, PostgreSQL, MySQL, Dynatrace

CERTIFICATIONS

AWS Certified Cloud Practitioner: Issued by Amazon Web Services (AWS) in April 2022.

Mental Health First Aid: Issued by National Council for Mental Wellbeing in May 2021.

Certified Adaptive Recreation & Sports Specialist – 1: Issued by BlazeSports America in December 2020.