Priyal Soni

MS CS @ UC Davis | Graduate Student Researcher @ UC Davis DataLab
CA | 530-574-9288 | pdsoni@ucdavis.edu | [LinkedIn](#) | [GitHub](#)

EDUCATION

University of California, Davis — Sept 2022 – Mar 2025
*Master of Science in Computer Science, GPA: 3.94/4 (**50% scholarship**)* — *California, USA*
- **Coursework:** Computer and Information Security, Distributed Database Systems, Software Engineering, Design and Analysis of Algorithms

Vellore Institute of Technology — July 2015 - June 2019
*Bachelor of Technology in Computer Science, GPA: 8.9/10 (**Top 5%**)* — *Vellore, India*

EXPERIENCE

UC Davis DataLab | Graduate Student Researcher — Sept 2024 - Mar 2025
Tech Stack: Python, Vue.JS, AWS EC2, Cloudflare — *Davis, CA*
- Engineered an **NSF funded project** for open-source navigator tool to track project health and highlight key actionables, improving the visibility and management of **300+** Apache and Eclipse Foundation projects for Open source sustainability

Calix | Security Intern — June 2024 - Sept 2024
Concepts: Threat Modelling, Network Security, Linux Systems — *San Jose, CA*
- Conducted threat modeling for NETCONF, RESTCONF, gRPC, and other communication protocols between Calix AXOS E9-2, E7-2, and E3-2 systems and Calix OneCloud, successfully reducing security risk exposures by 50%

ExpoLab at UC Davis | Research Assistant — Oct 2023 – May 2024
Tech Stack: Python, Vue.JS, GraphQL, Flask — *Davis, CA*
- Engineered a data visualization app using **Vue.js** which displays blocks, transaction details, ledger configurations, and a transaction history chart for the **Apache incubating ResilientDB** blockchain
- Developed a decentralized banking app for Ethereum and Radix, evaluating performance across versions based on transaction speed, cost, scalability, and ease of implementation.

Amazon | Security Intern — June 2023 – Sep 2023
Tech Stack: Python, RedShift, boto3 API, AWS Lambda, API Gateway, QuickSight, Neo4j — *Seattle, WA*
- Architected and deployed 15 security checks for evaluating vulnerabilities in AWS services using **Python** with the boto3 module and Docker. This targeted AWS's essential services— **EMR, SSM, and EC2 AutoScaling**—and achieved a **10%** improvement in security efficiency for the Application Security team.
- Constructed an AWS micro-service architecture for the HR Data Privacy/Legal team, incorporating **Lambda, RedShift, EC2,** and **QuickSight**, alongside custom **REST API** endpoints for an ETL microservice framework, resulting in a **40%** reduction in operational hours.

Dell Technologies | Software Engineer II — Apr 2021 - July 2022
Tech Stack: C#, .NET Framework, WPF, C++ and Entity Framework — *Remote*
- **Won the 2021 Dell Annual Hackathon** by creating a tool with Windows API and Android APK, improving user's network connectivity in low-coverage areas
- Developed Controller based Web APIs for the product **Dell Support Assist Recovery**, leveraging C#, Win32, and COM APIs for system level interactions.
- Created an OS penetration testing tool focused on ACL verification, digital signature checks, kernel driver validation, and identifying missing system vulnerability patches
- Led a team of 6 as the **Scrum Master** to align with Agile methodology

Dell Technologies | Software Engineer I — July 2019 – Mar 2021
Tech Stack: C#, PowerShell, Python and C++ — *Bangalore, India*
- **2019 Dell Hackathon Finalist** for adding screen sharing to Windows Recovery Mode for unbootable laptops.
- Released an offline OS Recovery Image tool for Dell, enabling factory resets on **300** platforms across all Windows versions using PowerShell, Windows ADK, and DISM.
- Streamlined the build process by integrating **Jenkins** reducing engineering development efforts by **36%**
- Implemented a **Python** based automated testing strategy for OS deployment, guided by a detailed test plan, saving **70%** of the operational time

Dell Technologies | Software Engineering Intern — Feb 2019 – June 2019
Tech Stack: Electron, Node JS, Bootstrap, JavaScript, JQuery and Bash — *Bangalore, India*
- Designed the UI for Dell SupportAssist Recovery v3.0 with Electron, optimizing repair features and reducing size by **30%.**
- Migrated service OS from SUSE to Ubuntu 18.0, improving server-client communication for Dell Wyse Thin Clients

TECHNICAL SKILLS

Languages: Python, C/C++, C#, JavaScript, TypeScript, PHP, SQL, Java, Go, Rust
Frameworks/Libraries: .NET, boto3, BeautifulSoup, Sockets.io, Requests, Node.js, Flask, Vue.js, React, GraphQL, ElectronJS
Developer Tools: Git, Docker, Kubernetes, Vercel, Cloudflare
Cloud Technologies: RedShift, AWS Lambda, DynamoDB, MongoDB, DynamoDB, AWS IAM