# Prameela Prakasha Kubsad

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## EDUCATION

- University Of California, Irvine, California (3.83/4.0) Expected Dec 2025
  **Master of Computer Science.** (Courses:Data Management, AI, Machine Learning, Operating Systems)

- KLE Technological University, Karnataka, India(3.608/4.0) Aug 2017-May2021
  **B.E, Computer Science** (Courses: Statistical Modeling, Computer Networks, OS, Principles of Compilers)

## TECHNICAL SKILLS

- **Programming Languages :** C, C++, Python, Java, CSS, R,MySQL.
- **Machine Learning Frameworks:** Tensorflow, Keras, Pytorch, OpenCV.
- **Cloud Computing:** Linode, GCP, AWS, Docker, Kubernetes, Git.
- **Data Science:** Numpy, Pandas, Scikit-learn,Statistics.
- **Frameworks :** React.js, Angular, Express, Node.js,Django
- **Devtools :** Code Blocks, Eclipse, Wireshark, Jupyter Notebook, Spyder, Visual Studio Code.
- **Skills:** Agile Methodology, FrontEnd Development, Backend Development, Scripting,Excel,Outlook.

## EXPERIENCE

**Akamai Technologies** Jul 2023 – Aug 2024

**Cloud Support Engineer (Frameworks :Edge DNS, Net Storage, Media Live Streaming)** Remote – Bangalore, Karnataka, India

- Troubleshot a wide range of Akamai's delivery products, specializing in Media solutions like Storage, Live Streaming, Cloud Wrapper, and Edge DNS, ensuring seamless content delivery.
- Monitored and guided **30+ customer** configurations, including high-traffic events like FIFA World Cup and IPL 2023, leading to a **40% increase in customer satisfaction**. Conducted in-depth network analysis using TCP traceroutes, packet captures, and Wireshark to resolve critical issues.
- Designed and implemented automation tools that boosted operational **efficiency by 25%**, cut manual **workload by 30%,** and accelerated issue resolution, enhancing overall customer satisfaction.

**Technical Solution Engineer (Frameworks : CDN,TCP/IP, Load Balance, WireShark, DNS)** Jul 2022 – Jun 2023

- Collaborated with cross-functional teams, including Security Architects, Engineering, Operations, Sales, Professional Services, and Account Management, to resolve complex technical issues, **reducing average resolution time by 25%**.
- Streamlined client web services **performance by 30%** through DNS-level and Application Layer Load Balancing techniques, leveraging cookies, headers, paths, and variables for efficient traffic distribution.

**Technical Solution Engineer Associate (Frameworks : Splunk, Web Application Firewall)** Jul 2021 – May 2022

- Independently worked with 10+ customer technical support teams on post-sales technical issues, conducting complex data analysis across distributed networks and enhancing origin infrastructure interactions, leading to a **20% improvement** in issue resolution efficiency.
- Supervised Security Monitor dashboards and Splunk logs to detect and mitigate network threats, ensuring **100% compliance** and escalating critical issues.

## RESEARCH EXPERIENCE

**LLM Agent Security** Feb 2025 – Present

- Scrutinized security vulnerabilities in LLM-based agents by analyzing weaknesses identified in the AgentDojo paper and evaluating recent defenses like IsolateGPT.
- Developing a novel security approach by drawing parallels with buffer overflow attacks, adapting control-flow bending and stack canaries to enhance AI security and inform next-generation frameworks.

## ACADEMIC PROJECTS

**Music Recommendation System (Framework:Tensorflow, Pytorch, Caffe, OpenCV)** Oct 2024 **–** Dec 2024

- Engineered a recommendation system using the Spotify dataset, applying Gaussian Mixture Models (GMM) for clustering and Principal Component Analysis (PCA) for dimensionality reduction, resulting in a **15% improvement in recommendation** accuracy
- Optimized the selection strategy with hyperparameter tuning and grid search based on silhouette scores, **boosting user engagement by 20%**.

**AI/ML-Based Behavioral Analysis (Framework:Numpy, Pandas,matplotlib,GridSearchCV)** Jan 2021 – Jun 2021

- Built and deployed classification models (Logistic Regression, Random Forest, XGBoost) to predict mobile app subscriptions, achieving **86% accuracy, 83% precision, and a 0.79 F1-score** with the tuned XGBoost model
- Applied advanced feature transformation techniques (cyclical encoding, polynomial & interaction features), improving model performance; fine-tuned thresholds via **precision-recall curves**, boosting Logistic Regression F1-score from **0.71 to 0.74.**