

# Denver Lobo

Houston, TX 77025

<https://denverlobo.github.io/portfolio/>

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## Skills

Python, Java, C#, C, C++, AngularJS, TypeScript, flask, HTML, CSS, shell script, NoSQL, SQL, maven, Git, spring-security, TensorFlow, PyTorch, AWS, OpenSSL, terraform, Docker, Kubernetes

## Experience

### **L3HARRIS Technologies, Lynchburg, VA**

*Senior Specialist Software Engineer*

Mar 2025 – Present

- Led technical strategy and architectural designs for product expansions, increasing code maintainability by 25% to improve audit readiness

*Specialist Software Engineer*

Aug 2019 – Mar 2025

- Directed cross-functional teams to optimize system design and workflows, reducing deployment lead time by 20%, while enabling more data-driven decisions
- Spearheaded the adoption of a Python-based AWS IoT platform, securely onboarding 40,000+ clients and streamlining onboarding by 40%, attaining 60% in cost savings through serverless architecture
- Orchestrated the migration of legacy Java modules to microservices based on Python, improving fault tolerance by 35% and reducing infrastructure costs by 15% annually
- Standardized infrastructure as code (IaC) using Terraform and automated deployments with Jenkins, ensuring configuration consistency across 3+ environments, from development to production instantly
- Spearheaded the creation of an OpenAPI specification document from inception for deployment via Terraform, diminishing API deployment-related errors to zero
- Streamlined Kubernetes configurations with Helm charts, reducing CPU usage by 20% and improving response times by 30%
- Innovated and delivered two innovative project initiatives during company hackathons, winning top prizes in both competitions

### **Contec Americas Inc., Melbourne, FL**

*Software Development Engineer*

Mar 2019 – Aug 2019

- Ensured 99% uptime for production tracking applications by maintaining and optimizing systems written in VB .NET
- Orchestrated comprehensive performance monitoring dashboards using SQL, and resolving over ten performance slowdowns, enhancing overall system responsiveness by 15%

*Computer and Systems Engineering Intern*

Jul 2018 – Mar 2019

- Engineered an IoT framework integrating embedded devices with AWS IoT Core, tamper protection and remote management, and achieved consistent system uptime
- Integrated custom key management system using C/C++ encryption libraries, enabling secure storage and rotation of encryption keys, reducing the risk of key compromise to zero

### **Florida Institute of Technology, Melbourne, FL**

Aug 2016 – May 2018

*AI and Machine Learning*

- Presented research paper regarding Learning Time Reduction in the Neural Network Back-Propagation Algorithm in Python achieving faster convergence
- Presented time-dependent shortest path algorithm with reduced time complexity by 15%, achieving gains primarily through optimization of the time values weighting process, implemented in Python
- Refined a strategic game engine with supervised learning, achieving a 97% success rate in simulations
- Integrated Sphinx, CMU PocketSphinx, and Google Cloud Speech recognition engines, enabling voice commands for Raspberry Pi, with 99% accuracy in recognizing common phrases.

*Data Science*

- Formulated complex network model using Python to identify high-risk accident zones; model achieved 85% accuracy in predicting accident clusters

*Student Management System*

- Created a 5GB fault-tolerant MySQL database in Java, optimizing query procedures to boost system performance by 15%

### **Tech Mahindra, Bangalore, India**

Jan 2014 - Jun 2016

*Software Engineer*

- Engineered key features for a microservices transportation platform using AngularJS and Java, and provided mentorship to 2 junior engineers
- Conducted comprehensive code reviews and static analysis; identified and resolved over 50 potential security vulnerabilities related to data validation, helping to achieve zero critical vulnerabilities in the system
- Simplified communication between services by redesigning, documenting integration specifications, and developing Proof of Concepts, reducing client-reported operational issues by 25% within the first six months
- Enhanced code robustness and stability by monitoring production code and developing J-unit test cases to uphold quality standards
- Optimized code maintainability by scrutinizing production code for potential vulnerabilities, implementing J-unit test cases achieving 95% code coverage
- Redesigned SQL procedures for accurate data extraction and reporting, ensuring integrity and reducing manual errors

**IBM India, Bangalore, India**

Aug 2013 - Jan 2014

*Technical Support Representative*

- Expedited the resolution of 90% of incoming technical support tickets from utilities and operators by creating a detailed knowledge base, improving first-call resolution rates

**Projects**

- Developed a GenAI-powered application with local models and MLOps, generating meeting summaries, identifying key actions, and customizing reports
- Pioneered a data-driven solution using neural networks to anticipate student dining patterns, achieving a 12% reduction in surplus food disposal and efficient resource allocation
- Collaborated in development of Enhanced image capture system utilizing OpenCV and ROS for an autonomous vehicle in IGVC, enhancing object detection precision and lowering latency

**Certifications**

- Certification in *AWS Cloud Solutions Architect* by Amazon Web Services on Coursera
- Certification in *Cloud-Native Development with OpenShift & Kubernetes* by Red Hat on Coursera
- Certification in *Machine Learning Specialization* by Stanford University & DeepLearning.AI on Coursera
- Certification in *Deep Learning* by DeepLearning.AI on Coursera
- Certification in *Machine Learning in Production* by DeepLearning.AI on Coursera

**Education**

**Florida Institute of Technology, Melbourne, FL**

Master of Science in Computer Science

**Visvesvaraya Technological University, Karnataka, India**

Bachelor of Engineering in Computer Science and Engineering