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Education

Universidad Autónoma de San Luis Potosí
B.E. in Intelligent Systems Engineering GPA: 85/100 [3.3]
• Relevant Coursework: Data Structures and Algorithms, Operating Systems, Databases, Software Engineering, Machine Learning, Computer Networks.

Expected Dec 2026
San Luis Potosí, México

Experience

Institut National de la Recherche Scientifique <i>Research Engineering Intern</i>	May 2025 – Aug 2025 Montréal, QC, Canada
• Built end-to-end ETL pipeline processing 6,000+ FIFA/EPL match statistics across 380+ matches per season, automating weekly performance predictions and match outcome analysis for sports analytics platform. • Engineered data preprocessing pipeline using NumPy and pandas to clean and transform web-scraped datasets, implementing probabilistic rating algorithms for team performance evaluation. • Deployed automated reporting system integrating Google Drive API and WordPress , delivering weekly updated interactive visualizations and predictions to platform users. • Technologies: Python , NumPy , pandas , matplotlib , Selenium , BeautifulSoup4 , PyDrive , gspread .	

Centro de Investigación y Estudios de Posgrado de la Facultad de Ingeniería <i>Research Engineering Intern</i>	Jan 2025 – Jun 2025 San Luis Potosí, México
• Developed CNN-LSTM machine learning pipeline for early Parkinson's disease detection through speech analysis, preprocessing 81 audio samples and extracting acoustic features using Librosa for diagnostic classification. • Designed and evaluated deep learning architectures in TensorFlow/Keras , conducting hyperparameter tuning experiments and comparing model performance across multiple architectures for medical diagnostic applications. • Technologies: Python , TensorFlow , Keras , Librosa , NumPy , pandas , matplotlib .	

Leadership & Entrepreneurship

Mariaca Restaurant Mx <i>Technology Lead</i>	Apr 2021 – May 2025 San Luis Potosí, México
• Led end-to-end digital transformation, implementing POS system, local network infrastructure, and real-time operational tracking across multiple business units. • Contributed to 10x business growth over 4-year period through data-driven decision making and process optimization; grew social media engagement by 400% through targeted digital marketing strategy. • Technologies: Power BI , Microsoft Office , Adobe Creative Suite .	

Projects

CiComp Overflow	
• Developed full-stack collaborative platform for Computer Science students using React and Next.js , implementing responsive UI components and user authentication.	
• Built RESTful API supporting CRUD operations for posts, comments, and user management; containerized application with Docker for consistent deployment across environments.	
• Collaborated in Agile development team using Scrum methodology, managing sprints and project workflows through Azure DevOps .	
Music Genre Classification	
• Implemented CNN-based audio classification system on GTZAN dataset (1,000 samples), extracting MFCC features using Librosa to capture spectral characteristics for genre recognition.	
• Developed and compared MLP vs CNN architectures in TensorFlow/Keras , achieving 73% accuracy with CNN architecture a 32% relative improvement over baseline MLP model.	
Lie Detection Using Facial Recognition	
• Processed real-life trial videos using OpenCV to extract facial expressions and prepare sequential data for deception pattern analysis.	
• Applied transfer learning with InceptionV3 and LSTM networks in TensorFlow/Keras to classify deception patterns from facial microexpressions.	