Nicholas Burgo

✉ Nicholas.burgo@selu.edu   📞 +1 985-662-8005   📍 Hammond, LA

Professional Summary

Senior CS + Data Science student with hands-on experience in full-stack engineering, AI/ML modeling, and large-scale web automation. Built production-grade systems including a 500+ page-per-run web extractor with bot evasion, an ensemble stock prediction model using LSTM/GRU/Transformers, and a full-stack ASP.NET marketplace. Teaching assistant for 40+ students, supporting debugging, software design, and backend development. Seeking SWE/AI/ML internship opportunities for Summer 2026.

Work Experience

Teaching Assistant – Southeastern Louisiana University   *Aug 2025 – Current | Hammond, LA*

- Supported 2 weekly classes with 8+ student groups (3-5 members each), providing expert guidance on full-stack development (C#, SQL, React) and debugging, improving project success rates by 30%.
- Mentored 40+ students through Discord and GitHub, fostering collaborative learning and increasing assignment completion rates.

Tech Assistant – Innovation Hub   *Aug 2023 – Current | Hammond, LA*

- Provided timely technical support for faculty and students, resolving hardware and software issues during events and daily operations.
- Developed C# scripts for Unity VR projects, enhancing functionality and user experience.

Education

Southeastern Louisiana University – Hammond, LA   *Dec 2026*
Bachelor of Science | Computer Science, Data Science

Relevant Coursework: Object-Oriented Programming, Data Structures, Data Mining, Artificial Intelligence.

Skills

Languages & Frameworks: Java, Python, Lua, C#, ASP.NET Core, React, SQL, TypeScript
AI & Data Analytics: LSTM, GRU, Transformers, Bayesian Optimization, Monte Carlo Simulation, Feature Engineering, NumPy, Pandas, Data Visualization Libraries
Tools & Technologies: GitHub, Unity, Blender, Nav Mesh

Projects

Fable Market   *Aug 2025 – Dec 2025*
- Built a full-stack book platform with ASP.NET Core backend and React frontend, enabling users to browse, purchase, and review books with efficient REST API endpoints.
- Implemented filtering and pagination features that improved search efficiency and user experience, supporting a scalable user base.

Multi-Model Ensemble Stock Price Prediction System   *Jan 2026 – May 2026*
- Designed and trained ensemble deep learning models (LSTM, GRU, Transformer) on 25 years of historical stock data, achieving 15.6% mean absolute error and improving prediction accuracy.
- Engineered 14 technical indicators and optimized hyperparameters using Bayesian optimization (Optuna), validated with Monte Carlo simulation for uncertainty quantification.

Universal Site Extractor   *Jun 2025 – Dec 2025*
- Developed a scalable full-stack web scraping platform with FastAPI backend and React frontend to extract and process 500+ pages per run, enabling multi-format content extraction (HTML, PDF, DOCX, JSON, CSV, images) with real-time progress monitoring.
- Implemented advanced bot avoidance and Cloudflare bypass techniques using browser fingerprint spoofing, FlareSolverr, and TLS fingerprinting, resulting in robust, high-throughput data extraction for diverse websites.