Leo Lee

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Education

University of Virginia, School of Engineering and Applied Sciences Aug. 2023 – May 2027
Bachelor of Science in Computer Science, Bachelor of Arts in Applied Statistics *Charlottesville, VA*

- **GPA**: 3.98 / 4.0
- Relevant Coursework: Data Structures and Algorithms, Discrete Mathematics and Theory, Linear Algebra, Probability, Regression Analysis, Computer Systems and Organization, Software Development, Machine Learning

Experience

Northrop Grumman Jun. 2025 – Present
Software Engineer Intern - Advanced Electronic Warfare *Baltimore, MD*

- Committed 600+ lines of code to proprietary Arbitrary Waveform Generator (AWG) Controller testing software, expediting program deployment by one month
- Led coordination with testing engineers to deliver key features, including a config-to-YAML converter, scalable RF Path-to-LO Group handling for thousands of signal states, and a full migration from MSBuild to CMake to streamline cross-platform builds.
- Designed and implemented full software architecture, data pipeline, and web interface for a comprehensive vehicle entry/exit data collection and analysis device at Northrop Grumman facilities.
- Refactored configuration parsing algorithm for unclassified ESM software using yaml-cpp, transitioning to YAML-based config files; improved robustness and efficiency of electronic intelligence testing workflows for the Advanced Electronic Warfare team, with immediate field deployment.

UVA Alumni Internship Experience Program May. 2024 – Aug. 2024
Full-Stack Developer *Fairfax, VA*

- Collaborated in a team to build an e-commerce app for college students, using React, HTML, JavaScript, and CSS for frontend, with Express.js and Postgres/Supabase for backend
- Adopted Agile methodologies, participating in sprint planning, daily stand-ups, and retrospectives
- Developed clothing sort functionality to enhance user experience and simplify shopping process
- Connected Postgres database to application to store user information and details of products being sold

Projects / Leadership

PGAssistant | *Python, XGBoost, NumPy, Pandas, scikit-learn* Jan. 2025 – Jul. 2025

- Built an end-to-end machine learning pipeline using XGBoost to predict PGA Tour player scoring averages, achieving a test RMSE of 0.44 strokes/round and explaining over 70% of variance in scores
- Engineered a custom Selenium-based web scraper to collect and process 1400+ rows of player statistics from official PGA Tour website, automating data acquisition and cleaning
- Applied XGBoost's gain-based feature ranking and 5-fold cross-validation to identify top 9 predictive stats, reducing model error by 15% versus all features
- Leveraged SHAP and partial dependence plots to interpret model outcomes, highlighting "Consecutive Greens in Regulation" and "Birdie or Better Percentage" as stronger predictors than traditional metrics

Social Chair | *Korean Student Association (KSA)* April. 2024 – May 2025

- Organized five events with an average attendance of 400-500 people to promote multiculturalism, diversity, and community awareness
- Partnered with 8+ cultural organizations to unify people of various backgrounds in an inclusive setting with activities such as sports tournaments and cuisine-tasting experiences

Technical Skills

Languages: Python, C++, Java, JavaScript, HTML/CSS, SQL, C, x86 Assembly
Frameworks/Technologies: REST APIs, Jupyter, PostgreSQL, JSON, Git, React, CMake, Linux, Node.js, Express.js
Libraries: pandas, XGBoost, NumPy, Matplotlib, TensorFlow, Keras
Interests: Competitive Club Golf, Basketball, Violin, Guitar