EMILY COMEAUX

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EDUCATION

The University of Tennessee, Knoxville, Tickle College of Engineering Knoxville, Tennessee
Bachelor of Science in Computer Science Graduation: May 2025
Cumulative GPA: 3.59/4.00
Dean's List: Fall 2022, Spring 2023, Fall 2023, Spring 2025

RELEVANT EXPERIENCE

Salesforce & Web Development Knoxville, TN
Internship, David Melendy May 2025 – Sep. 2025
- Collaborated with leadership and development teams to design and launch a partner-facing website.
- Designed and prototyped website layouts to meet business and branding requirements.
- Leveraged the Salesforce platform to integrate financial data seamlessly into the website.
- Programmed site features using Apex (Java), HTML, JS, and CSS to deliver an engaging and user-friendly experience for asset managers, practice technology, and insurance partners/vendors.

Mental Health Text-Intervention Development Knoxville, TN
Undergraduate Research Assistant, Dr. Nikola Zaharakis May 2024 - Aug. 2024
- Utilized the LAMP stack, CSS, HTML, and React to build engaging websites for UTK's Center for Behavioral Health Research.
- Implemented Twilio and TextIt APIs for SMS management, including phone numbers and text automation.
- Collaborated with professors on compiling a Qualtrics survey to recruit interested participants and assess for eligibility (101 individuals).

Phishing Research & Analysis Knoxville, TN
Undergraduate Research Assistant, Dr. Doowon Kim Jan. 2024 – May 2024
- Web-scraped client-side phishing resources and target brand websites to document the most frequent header of 6,033,058 appearances for the 'Server' header.
- Acquired meaningful parsed JSON datasets from phishing websites using recursive Python algorithm, such as retrieving server information (Apache & Nginx) and vulnerabilities.
- Presented crucial data results from server vulnerabilities and versions, and optimized coded applications for phishing prevention strategies and digital security initiatives.

RELEVANT PROJECTS

GenAI for Future Retail – Capgemini Sponsored Capstone
Designer, Programmer
- Collaborated on a React Native mobile app with integrated AWS for voice and chatbot features to assist shoppers with real-time inventory, optimized store navigation, and mock online ordering.
- Led frontend UI design using Figma and implemented the layout screen in JavaScript.

Credit Card Fraud Detection
Programmer
- Contributed with a team of student developers for classification tasks in the outcome of credit card fraud transactions using Python, Scikit-learn, Pandas, NumPy, Seaborn, and TensorFlow.
- Implemented machine learning methods such as feature selection, ensemble learning (XGBoost and Random Forest), and hyperparameter tuning (Regularization and GridSearchCV).
- Obtained a high baseline model accuracy of 98.2%, proving to be robust and optimized after multiple iterations of fine-tuning adjustment.

SKILLS & ABILITIES

- Languages: C suite, Java, JavaScript, Python
- Web Development: HTML, CSS, SQL, React, Node.js, Firebase, Figma
- Machine Learning: Scikit-learn, Pandas, NumPy, Matplotlib, Seaborn, TensorFlow
- Tools & Software: Unix, Git, VSCode, Jupyter Notebook, Android Studio, Unity, WordPress, MS Office