



Larissa Okabayashi

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PROFILE

Computer Engineering student with hands-on experience in developing AI-powered iOS applications. Passionate about building ethical, human-centered technology through interdisciplinary collaboration and technical excellence in Swift, CoreML, and Python.

EXPERIENCE

- **Hochschule für Angewandte Wissenschaften Hamburg** Hamburg, Germany
Studentische Hilfskraft – RESI Project (DAAD-funded) Apr 2025 – Present
 - **Course Development and Digital Learning:** Co-creating an interactive data literacy course using H5P on Moodle, enhancing AI education outreach for over 200+ international students.
- **Apple Developer Academy** Eldorado Institute, Campinas
iOS Development Student Feb 2023 – Dec 2024
 - **Proficient in Swift and Apple Ecosystem:** Shipped 8+ iOS apps using Swift; 4 published on the App Store.
 - **Leadership in Multidisciplinary App Development:** Led 3+ multidisciplinary teams through end-to-end app development cycles, improving iteration speed via Agile methodologies.
 - **Advanced Machine Learning and iOS Integration:** Applied advanced knowledge in machine learning, CoreML, CoreData, CloudKit, and user interface design.
- **Scientific Initiation in Finance and AI** H.IAAC, Campinas
Undergraduate Researcher Jul 2023 – Aug 2024
 - **Ethical AI for Interpretability:** Built interpretable credit scoring explanations using ethical AI methods, improving stakeholder trust and transparency in ML models.
 - **Analytical Methods:** Applied PDP and SHAP to identify key features in loan decision models, increasing model explainability by 70%.
 - **Optimized AI Responses with Function Calling and Prompt Engineering:** Integrated Llama 3-70B with APIs for real-time data processing, combining Function Calling API with diverse Prompt Engineering techniques to maximize response accuracy and performance.
- **Gerdau** São Paulo, SP
Data Science Intern Dec 2021 – Mar 2022
 - **Advanced Regression Techniques for ESG Forecasting:** Forecasted CO2 emissions for Brazil's largest steel plant using Scikit-learn, improving ESG prediction accuracy by 15%.
 - **Enhanced Sustainability Planning:** Strengthened sustainability planning by deploying ML models into Gerdau's decision pipeline, influencing strategic CO2 reduction initiatives.
- **Unicamp E-racing** Campinas, SP
Driverless Member Mar 2021 – Aug 2023
 - **DevOps Workflow Automation:** Automated daily scrum documentation using Python and Google Sheets API, streamlining team workflows and reducing manual effort.
 - **Predictive Modeling for Autonomous Navigation:** Developed a predictive model for autonomous route mapping, enhancing navigation and performance by 30% in simulation tests.
 - **Real-Time Path Planning with SLAM and Computer Vision:** Integrated SLAM and computer vision for real-time path planning, reducing route computation time by 25%.

AWARDS

- **Distinguished Winner – Apple Swift Student Challenge 2025:** Selected as one of 50 worldwide for Yume’s Spellbook, an iOS app that gamifies LLM training through interactive storytelling. Integrated a Core ML-optimized GPT-2 model with pruning and quantization. Invited to WWDC 2025 in Cupertino. [GitHub] App Store
- **Apple Swift Student Challenge Winner 2024:** Awarded for Yume The Wizard, an educational iOS game teaching interpretability and fairness in ML through narrative gameplay. Used CoreML and SpriteKit. Featured at WWDC 2024 in Cupertino. [GitHub]

PROJECTS

- **Earth: Final Season:** iOS game available on the App Store. Implemented a state machine for game logic, managed decision trees that influence socio-political and environmental stability, and designed multiple endings based on player choices and audience ratings. GitHub Link App Store
- **Phobia-Sensitive Content Blocking Extension:** Developed a Safari extension using machine learning to block sensitive content tailored for individuals with specific phobias. Led the team in designing and training an image classification model to identify and filter triggering content.
- **Puyo-Puyo Game:** Developed a Java game inspired by a Nintendo video game released only in Japan, showcasing skills in object-oriented programming and game design. GitHub Link

EDUCATION

- **Hamburg University of Applied Sciences (HAW Hamburg)** Hamburg, Germany
Exchange Program in Information Engineering Mar 2025 – Mar 2026
- **State University of Campinas (Unicamp)** Campinas, Brazil
Bachelor’s Degree in Computer Engineering Feb 2021 – Feb 2026
 - **Degree Equivalency:** Equivalent to the former German “Diplom-Ingenieur” in Engineering, according to typical European academic recognition standards.

TECHNICAL SKILLS

Programming Languages: Python, Swift, Java, Kotlin, JavaScript, SQL
AI & ML Frameworks: TensorFlow, PyTorch, Scikit-learn, Hugging Face, CoreML
UX Tools: SwiftUI, React, Figma
Development Tools: Xcode, Git, Docker, AWS, Jupyter Notebooks, Linux
Project Methodologies: Agile, Scrum, Cross-functional collaboration

LANGUAGES

Portuguese: Native proficiency
English: Full professional proficiency
Spanish: Intermediate proficiency
German: Basic proficiency

CERTIFICATIONS

- **TOEFL ITP** ETS
613 Points – C1 Advanced English Level 2024
- **App Development with Swift Certified User** Apple Inc.
Recognizes basic proficiency in Swift programming. Covers core concepts in Develop in Swift Fundamentals. Issued: 2024