

Tianyun Wang

lydiaw0421@gmail.com | (872) 904-7662 | tyyw0421.github.io

EDUCATION

Georgia Institute of Technology

M.S. in Computer Science (HCI), GPA: 4.0/4.0

Part-Time
Jan 2024 - May 2027 (Expected)

University of Chicago

M.A. in Digital Studies (STEM), GPA: 3.9/4.0

Honors: Divisional Scholarship

Chicago, IL
Sep 2022 – Jun 2023

University of Miami

B.S. in Interactive Media (HCI), GPA: 3.8/4.0 (Major GPA: 4.0)

Double Major: Media Management; Minors: Communication Studies & Art

Honors: Cum Laude, Provost's Honor Roll, Dean's List

Coral Gables, FL
Aug 2018 – May 2021

PUBLICATION

Tianyun Wang, Yanzhang Zhu, "The CreateML-based Compared to the AutoML-based Approach to Animal Image Classification," *International Conference on Cloud Computing, Performance Computing, and Deep Learning (CCPCDL 2022)*, <https://doi.org/10.1117/12.2640908>

PROFESSIONAL EXPERIENCE

Gree Commercial USA

Engineer Manager

Boston, MA
Dec 2023 - Present

- Led the end-to-end development of a full-stack responsive web platform using React.js, Node.js, and PostgreSQL
- Designed and implemented a CI/CD pipeline utilizing Docker and AWS, reducing deployment times by 40%
- Developed Python data processing scripts with Pandas to analyze customer behavior and optimize features
- Engineered A/B testing framework that resulted in a 28% increase in sales conversions by data-driven iterations
- Managed cross-functional collaboration with marketing team to align implementation with business objectives

University of Chicago

GIS Researcher and Programmer

Chicago, IL
May 2023 - Present

- Built high-accuracy geospatial data processing pipeline using Python with GeoPandas and Shapely libraries
- Improved dataset integrity by 32% through implementation of automated validation and correction algorithms
- Integrated Google Cloud Vision and NLP API for automated metadata extraction, enrichment, and visualization
- Developed photogrammetry workflow using Agisoft Metashape with Python scripting for 3D model generation

Wilson-Bennett Technology, Inc.

Data Analyst

Chicago, IL
Nov 2022 - Jun 2023

- Designed and implemented robust ETL pipelines in Python and SQL for processing large-scale alumni datasets
- Developed automated data validation frameworks and monitoring dashboards for data quality assurance

Hile Interactive Technology

VR Software Engineer

Chongqing, China
Feb – Sep 2022

- Programmed virtual reality game for Meta Quest 2 using C# in Unity engine with focus on mobile optimization
- Implemented core gameplay systems including physics object interaction, dynamic UI, and AI behavior trees
- Conducted user testing and implemented data-driven iterative improvements based on usability feedback analysis

Zhenai Information Technology Co., Ltd

Frontend Development Engineer Assistant

Shenzhen, China
Sep – Dec 2021

- Developed dynamic single-page applications using Vue.js with Vuex for state management and Vue Router
- Built responsive component library with Webpack module bundling and Sass preprocessor for styling
- Created Node.js backend services with Express.js framework for RESTful API development and integration

Skyworth Group Co., Ltd

UI Engineer Intern

Shenzhen, China

May – Jul 2021

- Designed and prototyped TV interfaces using Figma and Axure, delivering wireframes and interactive mockups
- Built design systems and component libraries to maintain consistency across screen sizes and resolutions

Division of Continuing & International Education, University of Miami

Web Development Assistant

Miami, FL

Nov 2019 – May 2021

- Developed responsive web templates and interactive content for Blackboard using HTML5, CSS3, and JavaScript
- Integrated multimedia elements and components with Adobe Creative Suite into online course modules

Trigate Lomas-Connect

Digital Media Director: Web Developer, Interaction Designer

Miami, FL

Aug 2019 – May 2021

- Engineered a full-stack medical tourism website with responsive React.js frontend and scalable Node.js backend
- Built interactive Tableau dashboards to visualize key healthcare metrics and service utilization patterns

PROJECTS

covid taKedown

Interaction Designer, advised by Prof. Ken Nakagaki

Chicago, IL

Jan – Apr 2023

- Engineered real-time data visualization system using Processing with custom k-means clustering algorithm
- Developed hardware/software interface to control physical robot prototypes (Sony Toio) based on data models
- Created detailed 3D data representations using Fusion 360 and integrated with a physical visualization system

Animal World iOS APP with CreateML

ML Engineer & iOS Developer, advised by Prof. Noah Gift from UC Berkeley

Remote

Jul – Dec 2021

- Designed and trained a convolutional neural network using Apple's CreateML and Turicreate frameworks
- Engineered a high-performance native iOS application with Swift/SwiftUI for real-time image classification
- Optimized and deployed Core ML model using advanced quantization techniques for efficient mobile inference

Café SereniTea VR Game (<https://tianyunwang0421.itch.io/cafe-serenitea>)

XR Engineer of XRStellars, participated in XR Brain Jam by Carnegie Mellon University

Miami, FL

Jun – Jul 2021

- Built an immersive VR environment completely in Unity3D with C# scripting and Oculus Integration SDK
- Implemented various interactive systems including object manipulation, character movement, and UI interactions

Poppin' Media

Web Developer, advised by Prof. Winston Warrior

Miami, FL

Jan – May 2021

- Developed a responsive media review platform using modern HTML5, CSS3, and JavaScript (ES6+) features
- Built a complete RESTful API backend with Python/Flask framework and SQL for database management

Animal Time AR iOS APP

AR Engineer, advised by Prof. Ching-Hua Chuan

Miami, FL

Jan – May 2020

- Developed an educational augmented reality iOS app using Unity and Vuforia for image recognition and tracking
- Implemented advanced features including plane detection, object occlusion, and interactive 3D model rendering

VOLUNTEERING

Office of Disability Services, University of Miami

Student Volunteer

Miami, FL

Aug 2019 – May 2021

- Developed accessible materials and alternative format content for students with disabilities to ensure compliance

SKILLS

Programming Languages: Python, Java, JavaScript/TypeScript, C/C++, C#, SQL, Swift, HTML5/CSS3

Frameworks & Libraries: React.js, Node.js, Express.js, Vue.js, Flask, TensorFlow, Pandas, NumPy, Unity3D

Cloud & DevOps: AWS (EC2, S3, Lambda, RDS), Docker, CI/CD, Git, Jenkins

Databases: PostgreSQL, MySQL, MongoDB, Redis, Snowflake, Database Design & Optimization

Design & Prototyping: Figma, Adobe Creative Suite (PS, AI, XD, PR), Axure, Miro, Blender, Unreal Engine

Engineering Methodologies: Agile/Scrum, System Design, RESTful APIs, A/B Testing, UX Research