

# EDRIAN PAUL LIAO

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## EDUCATION

**Duke University, GPA: 3.92**

**Expected: May 2025**

BSE Electrical and Computer Engineering, BS Computer Science (ML/AI Concentration)

*Durham, NC*

**Certificate:** Science and Society - Digital Intelligence Track

**Relevant Coursework:** Deep Neural Nets (Graduate), Machine Learning, Artificial Intelligence, Signals and Systems, Advanced Multivariable Calculus, Probability, Operating Systems, Environmental Science and Policy

## RESEARCH INTERESTS

Machine learning for climate change monitoring and disaster risk management, Remote sensing using satellites and drones, Data- and media-driven storytelling for environmental justice

## RESEARCH EXPERIENCE

**Spatial causal inference model using satellite data to mitigate urban heat island effect**

**Jan 2024 – Present**

Independent Study · Prof. David Carlson

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**Long-term earthquake prediction using time-series forecasting models**

**May 2023 – Present**

Research Group @ Duke · Dr. Enmao Diao · [\[Code\]](#)

*Durham, NC*

**PlanetTales: Climate change experiences in the rural Philippines**

**Jul - Sep 2023**

Independent Study · Prof. Kyle Bradbury · [\[Website\]](#) [\[Code\]](#) [\[Poster\]](#)

*Cauayan, Philippines*

**Tracking climate change causes and impacts with satellites and AI**

**May – Jul 2022**

Duke Climate+ · Prof. Kyle Bradbury · Prof. Jordan Malof · [\[Website\]](#) [\[Code\]](#) [\[Poster\]](#)

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## TEACHING EXPERIENCE

**Teaching Assistant**, Intro to Artificial Intelligence

**Spring 2024**

**Teaching Assistant**, Fundamentals of Electrical and Computer Engineering

**Spring 2023 – Present**

**Teaching Assistant**, Calculus I and II

**Spring 2022, Fall 2022**

## SELECTED PROJECTS

**Web Application for Project Kayamanan**

**Oct 2022 – Present**

Technify Initiative, Lead Software Engineer · [\[Code\]](#)

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**DoseDocker: A Smart IOT Pill Box**

**Sep 2023**

HackDuke: Code for Good · [\[Devpost\]](#) [\[Code\]](#)

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**Adjustable and Mobile Camera Holder for Scanning Arches**

**Aug - Dec 2021**

Duke Digital Art History and Visual Culture Research Lab · [\[Arch 1\]](#) [\[Arch 2\]](#) [\[Poster\]](#)

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## LEADERSHIP & MENTORSHIP EXPERIENCES

**President and Co-Founder**, Duke Pamilya: Filipino Students Association

**2022 - Present**

**Mentor**, CAUSE Philippines: College apps mentorship program for low-income Filipinos

**2021 - Present**

**Co-Founder, Tutor**, Pi-oneers: STEM Education Non-profit

**2020 - 2022**

**Co-Organizer**, Project *Manantaw*: Initiative for typhoon victims in the Philippines

**2020**

## SKILLS

**Languages:** Python, C, Java, LaTeX, HTML/CSS, JavaScript, MATLAB, C++

**Libraries, Databases, and Frameworks:** Node.js, PyTorch, Google Earth Engine, Google Firebase, MongoDB, NumPy, Matplotlib

**Devops:** Git, Linux, Docker, Bash, GitHub Projects, Agile Product Development

## HONORS & AWARDS

**Karsh International Scholarship**, Duke University

**2021-2025**

**Winner**, HackDuke: Code for Good

**2023**

**Outstanding Teaching Assistant Citation**, Duke Electrical and Computer Engineering Dept.

**2023**