#### VU ANH LE

Box 1091, Beloit College Mail Center, 700 College Street • Beloit, Wisconsin 53511 • csplevuanh@gmail.com [Personal Website] • [LinkedIn] • [ORCID]

#### **EDUCATION**

Beloit College
Bachelor of Science, Mathematics

Beloit, WI

Aug 2021 - May 2025

Relevant Coursework: Discrete Mathematics, Linear Algebra, Mathematical Statistics, Differential Equations, Complex Analysis, Object-oriented Programming, Data Structures and Algorithms, Mathematics Colloquium

## **SKILLS & INTERESTS**

**Programming and Software:** Programming (Python, MATLAB, R), Machine Learning (TensorFlow, PyTorch), Data Analysis (Pandas, NumPy)

**Technical Expertise:** Numerical Methods, Differential Equations, Remote Sensing (QGIS, ArcGIS) **Interests:** Physics-Informed AI, Evidence-Based Decision-Making, Environmental Sustainability

### WORK EXPERIENCE

Google Research

Remote

Research Intern

Aug 2024 - Present

- Developed a mathematical framework for analyzing the behaviors of neural operators. This framework provides theoretical guarantees on stability, exponential convergence, and generalization.
- Applied the proposed framework in designing a case study model for solving complex partial differential equations. Compared with the state-of-the-art works, it achieves 93% accuracy with 15% fewer training epochs.

#### Massachusetts Institute of Technology

Cambridge, MA

## Research Assistant, Department of Nuclear Science and Engineering

Aug 2023 - Present

- Integrated two machine learning models (i.e., Random Forest and Bidirectional LSTM models) in the contaminant monitoring software for nuclear material safety supervision.
- Achieved 97.7% accuracy in predicting the time taken for nuclear analyte concentration to drop to safety levels.

#### Vietnam's Ministry of Natural Resources and Environment

Hanoi, Vietnam

# Research Assistant and Compliance Reporter, Remote Sensing Department

April 2020 - Present

- Adopted SAR data and interferometric processing to monitor human-induced land deformation, achieving a 1-meter resolution accuracy in generated maps.
- Presented the results to the government and National Assembly on the effects of the deformation processes, hydroelectric power, and mining operations.

### ADDITIONAL EXPERIENCE

#### Legal Initiatives for Vietnam

Remote

Paralegal Assistant

Dec 2023 - Present

- Conduct legal research on the current political strategies and policies implemented by Vietnamese authorities.
- Publish opinions on critical political issues via the affiliated newspaper "Luat Khoa Tap Chi".

#### Beloit Math and CS Club

Beloit, WI

Co-founder and President

Aug 2021 - May 2023

- Updated students on field-related opportunities such as research projects, internships, and employment.
- Set preparatory sessions for undergraduate competitions like the Mathematical Contest in Modeling and Putnam