



EDUCATION

- University of Vermont** Burlington, VT
M.S. in Computer Science May 2021
Advisor: Prof. Byung Suk Lee
- University of Vermont** Burlington, VT
B.S. in Computer Science and Statistics, Minor in Economics May 2020

RESEARCH INTERESTS

- Algorithms and data structures
- Social networks
- Data mining
- Explainable artificial intelligence

RESEARCH EXPERIENCE

- University of Vermont**
Graduate Research Assistant Aug 2020 – Present
Advisor: Prof. Byung Suk Lee & Prof. Wen Dong
- Conducted network and statistical analyses to identify interaction patterns in sensory data.
 - Identified trends relating interactions and characteristic statistics.
 - Designed methodology to re-construct interaction patterns using RSSI.
- University of Vermont**
Research Assistant Jan 2019 – May 2020
Advisor: Prof. Byung Suk Lee
- Designed evaluation methodology to test the performance of a neural network to classify ECG segments.
 - Developed an augmentation scheme for ECGs to use in train and test time evaluation.
 - Implemented class activation maps to identify areas of influence within the ECG.
 - Developed an application for processing, interacting, and visualizing 12-lead ECGs in Python.
- University of Vermont**
Research Assistant Jan 2020 – May 2020
Advisor: Prof. Bernard Cole
- Conducted statistical analyses for Veterans Affairs on a longitudinal study of the effects of a mailer on benzodiazepine use among veterans.
 - Developed and analyzed a mixed effects model for identifying the significance of various variables with particular focus on rurality.

PUBLICATIONS

- [1] E. Do, J. W. Boynton, B. S. Lee, and D. Lustgarten, “12-lead imbalanced beat classification using time series resnet”, Submitted, 2020.

TEACHING EXPERIENCE

- **Graduate Teaching Assistant** at University of Vermont Fall 2020
Algorithm Design and Analysis (CS 224)
Computability and Complexity (CS 125)
- **Undergraduate Teaching Assistant** at University of Vermont Fall 2018
Algorithm Design and Analysis (CS 224)

PROJECTS

- **Economic Resource Availability**
Analyzed a community's ability to weather financial setbacks through social lending

SKILLS

- **Computer Languages:** Python, R, Java, C, Bash
- **Frameworks & APIs:** Tensorflow, Flask, Node.js
- **Databases:** SQL, MongoDB
- **Tools:** Git, Vim, Docker

RELEVANT COURSEWORK

- Deep Learning
- Algorithm Design and Analysis
- Theory of Computation
- Data Privacy
- Principles of Complex Systems
- Modeling Complex Systems

SCHOLARSHIPS AND AWARDS

- Green and Gold Scholarship 2016–2020
- Peoples United Bank Scholarship 2016–2020