KOSTADIN DEVEDZHIEV

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EDUCATION

Stony Brook University Sep 2018 – May 2022

Bachelor of Science in Computer Science, Applied Mathematics & Statistics
Specialization in Artificial Intelligence and Data Science
Computer Science Honors Program
Grade Point Average: 3.88/4.00

WORK AND RESEARCH EXPERIENCE

Natural Language Processing Research Assistant, *Stony Brook University* Aug 2021 - Present

- Researching human-in-the-loop approaches for data collection and annotation.
- Developing a machine learning powered user interface for annotation.
- Created regular expressions for automatic parsing of Request for Comments (rfc) documents.
- Analyzed and evaluated the performance of a natural language parsing system.

Radiology Research Assistant*, Stony Brook University* Mar 2021 – Present

- Researched mini-beam radiation therapy for Alzheimer's disease.
- In charge of data analysis on the cognitive testing and immunohistochemistry results.
- Set up cognitive testing for memory and learning using the Morris Water Maze.
- Responsible for the computation, medical imaging, and object tracking.

Artificial Intelligence Research Assistant*, University of Hawaii at Hilo* Jun 2020 – Aug 2020

- Researched and developed human-in-the-loop artificial intelligence for human-computer interaction.
- Trained a convolutional neural network with transfer learning and data augmentation.
- Developed a Bayesian algorithm for hyper-parameter tuning.
- Built a multithreaded application that handles detection, classification, and user interaction real-time.

Software Engineering Intern, *Vivansa Ltd* Jun 2019 – Aug 2019

- Worked on the frontend for a web app system using React.
- Fixed bugs responsible for erroneous entries in a database for a transportation company.
- Practiced agile software development and worked collaboratively with different departments.

TEACHING AND LEADERSHIP EXPERIENCE

Embedded Machine Learning Team Leader, Stony Brook University Aug 2020 - Present
Developed a custom gesture recognition pipeline for microcontrollers

Applied Mathematics & Statistics Teaching Assistant, *Stony Brook University* Aug 2020 – May 2021
AMS 210: Applied Linear Algebra

Linear Algebra Grader, *University of Hawaii at Hilo* Mar 2020 – May 2020
MATH 311: Linear Algebra

Computer Science Grader*, University of Hawaii at Hilo* Oct 2019 – Dec 2019
CS 150: Introduction to Computer Science

PUBLICATIONS

EMF Generated by Squeezing an Ellipse

- Developed a numerical algorithm that performs a non-trivial computation to find the EMF induced in an elliptic loop under compression with machine precision.
- Binder et al 2020 Eur. J. Phys. https://doi.org/10.1088/1361-6404/ABB066