Antonio Laverghetta Jr.

580-583-9743 ◊ A.V.Laverghetta@gmail.com ◊ [LinkedIn] ◊ [GitHub]

EDUCATION

Ph.D. in Computer Science | University of South Florida | May 2023 (expected)
BS in Computer Science | University of South Florida | December 2018

EXPERIENCE

Graduate Research Assistant January 2019 – Present
Advanced Machine and Human Reasoning Lab, Tampa, FL

- Developed a model of semantic relatedness using LSA and sci-kit learn.
- Designed a computational model of analogies using Category Builder, Word2Vec, and other language models
- Used PyTorch to create a curriculum earning framework to improve performance of the BERT and RoBERTa language models on Natural Language Inference tasks
- Work was published at respected conferences

Teaching Assistant April 2020 – September 2020
Trilogy Education, New York, NY

- Mentored students in Trilogy's Data Analytics Bootcamp
- Instructed students on a variety of Data Science tools, including SQL, Python, AWS, and Tableau among others
- Delivered a lecture PyTorch for NLP applications
- Overall satisfaction was consistently rated 4 or higher on a 5-point scale

Computer Science Intern May 2018 – September 2018
ConnectWise, Tampa, FL

- Created Python test scripts for ConnectWise Manage web application
- Researched original issue to develop reproducible steps for testing
- Troubleshooted issues with REST API using Postman and Requests
- Used git and CodeCollab to maintain quality assurance and source control
- Completed 16 test suites for various use cases, used for QA in production environments

Intern August 2016 – July 2017
Tenex Software Solutions, Tampa, FL

- Developed Tenex's .NET web application platform
- Implemented UI improvements using Bootstrap and DevExpress
- Created and debugged SQL queries to interface with multiple MySQL databases
- Performed maintenance on AWS infrastructure as necessary
- Succeed in resolving approximately 125 bugs in both the frontend and the backend

PUBLICATIONS

Laverghetta Jr., A. and Licato, J. "Modeling Age of Acquisition Norms Using Transformer Networks", 34th International FLAIRS, 2021 (submitted)

Laverghetta Jr., A., Mirzakhalov, J., and Licato, J., "Towards a Task-Agnostic Model of Difficulty Estimation for Supervised Learning", AACL-IJCNLP Student Research Workshop, 2020

Boger, M., **Laverghetta Jr., A.**, Fetisov, N., and Licato, J., "Generating Near and Far Analogies for Educational Applications: Progress and Challenges", ICMLA, 2019

SKILLS AND CERTIFICATIONS

Operating Systems: Windows 7/8.1/10, Linux+ certified
Languages: Java, VB.NET, HTML, CSS, Javascript, JSON, SQL, YAML, Python (skilled)
Libraries: NumPy, SciPy, scikit-learn, NetworkX, OpenCV, Bootstrap, Tensorflow, PyTorch, Keras, Transformers, SimpleTransformers, Flask, Matplotlib, Pandas, Jupyter
Development Tools: Visual Studio, git, Notepad++, Anaconda, Postman, github, PyCharm
Protocols: IP, TCP, UDP, HTTP, DNS
Cloud: Google Cloud, AWS
Theory: Linear Algebra, Knowledge Graphs, Computer Vision, Image Processing, Reinforcement Learning, Deep Learning, Natural Language Processing (skilled)
Productivity: Word, PowerPoint, Excel, Teams, Slack, Trello

LEADERSHIP AND COMMUNITY SERVICE

Founding President November 2017 – December 2018
Society of Competitive Programmers USF Student Organization

Volunteer Researcher November 2020 - Present
Turkic Interlingua

- Developed language models for low resource Turkic languages
- Wrote web scraping scripts to extract monolingual and bi-text data
- Submitted work for publication at ACL-IJCNLP