Daniel Bis

Tallahassee, FL 32304 ■ 850.566.1817■ danbisoffice@gmail.com ■ www.github.com/danielbis

Education

Doctor of Philosophy in Computer Science **August 2019 – Present**
Florida State University, Tallahassee, FL GPA: 4.0
Bachelor of Arts in Computer Science **May 2019**
Florida State University, Tallahassee, FL CS GPA: 3.75
GPA: 3.57

Technical Skills

Programming Languages: **Python, C++, C, JavaScript, SQL**
Frameworks: **PyTorch**, **TensorFlow, Keras**, **NumPy, Pandas, Flask, Express**
Databases: **PostgreSQL, ElasticSearch, MongoDB**

Experience

Research Assistant, Florida State University **May 2018 – Present**

- Member of Natural Language Processing and Deep Learning groups. Studies fundamental questions related to enabling machines to become more adept at human language.
- Currently focused on self-supervised representation learning, text summarization, non-autoregressive text generation and analysis of representations learned by language models.
- Worked on projects related to word sense disambiguation, text summarization and interpretable bioinformatics.

NLP/Software Engineer Intern, Samsung R&D Institute Poland **June 2019 – August 2019**

- Developed new features and services for the next-generation dialogue systems.
- Used C++/Java/Python to implement state of the art Machine Learning and NLP algorithms.
- Worked with a large amount of data, using both relational and non-relational database systems.

Teaching Assistant, Florida State University **September 2017 – May 2019**

- Responsible for helping students understand the material covered in Object Oriented Programming (C++) and Computer Fluency courses.

Peer-Reviewed Conference Papers

1. Bis, D., Zhang, C., Liu, X., He, Z. *Layered Multistep Bidirectional Long Short-Term Memory Networks for Biomedical Word Sense Disambiguation*, 2018 IEEE International Conference on Bioinformatics and Biomedicine.
2. Payrovnaziri, N,. Barrett, L., Bis, He, Z. *Enhancing Prediction Models for One-Year Mortality in Patients with Acute Myocardial Infraction and Post Myocardial Infraction Syndrome*, MEDINFO 2019
3. Zhang C., Liu X., Bis D., *An Analysis on the Learning Rules of the Skip-Gram Model*, IJCNN 2019

Peer-Reviewed Journal Papers

1. Zhang C., Bis D., Liu X., Zhe H., *Biomedical Word Sense Disambiguation with Bidirectional Long Short-Term Memory and Attention-based Neural Networks,* BMC Bioinformatics

Talks

1. Bis, D., Liu, X., *DARTS: Dependency Aware Reinforced Text Summarization using Tree-Structured LSTM Encoder with Multilevel Attention.*

Other Projects

Storm-Risk

- A mathematical model created in Python (NumPy), simulates the damage from hurricane force winds based on the house characteristics. Mobile and web version implemented using Flask.

BookIt

- Web application that enables easy appointment scheduling. Implemented using Flask and SQL database.

T$hirt

- Recommendation system, finds the most similar images to the image provided by a user.
- Image features are extracted from the last pooling layer of Inception v3 neural network architecture and clustered using K-Means clustering algorithm.

Chatbot

- Built using Facebook Messenger API, NodeJS, MongoDB, hosted on Heroku. Takes an order for a restaurant.

Bash Shell

- Implemented with C, including features like piping, background processing and I/O redirection.

Elevator Kernel

- Linux Kernel Module representing an elevator. Supports concurrency using multi-threading and synchronization techniques.

Awards

- 2nd Award, Poster Contest, Florida State University CS Expo **November 2018**
- Florida-Eastern European Linkage Scholarship Recipient **August 2016 – May 2019**
- Nancy Casper Hillis and Mark Hillis Undergraduate Research Grant **May 2018**
- ACC Academic Honor Roll **2016 – 2017, 2017-2018**

Extracurricular Activities

- Florida State University Varsity Men's Swim Team **August 2016 – May 2019**
- Polish Swimming National Team Member and National Championship Medalist
- French Open Championship runner-up in swimming