### **David Duffrin**

https://duffrind.github.io · Sarasota, FL 34243 · david.duffrin15@ncf.edu

**SKILLS** Expert: Git - Python - PostgreSQL - NoSQL - Matplotlib - Hadoop - Numpy - Pandas

Proficient: Java - C++ - R - JavaScript - tidyverse - NodeJS - D3 - SKLearn - SKImage

Familiar: ECL - Bash - AWS EC2 - LaTeX - Tensorflow - Keras - Japanese

EDUCATION New College of Florida The Honors College of Florida

M.S. Data Science **GPA: 3.85**B.A. Computer Science

August 2017 - May 2019

August 2015 - May 2017

Nagasaki University of Foreign Studies

March 2013 - December 2013

Cultural Exchange

**B.S. Software Engineering** 

**University of Wisconsin-Platteville** 

August 2011 - May 2015

Transferred to New College of Florida

**PROJECTS** 

Intuition Behind Japanese Kanji - Undergraduate Thesis

• Using Bayesian Networks and NLP techniques to estimate kanji pronunciation

StudySubs SRS Flashcard Creator - https://studysubs.com/

- Users upload Japanese subtitles or ebooks to create personalized SRS flashcards
- A NodeJS WebApp using Google Firebase technologies
- Uses NoSQL database to maintain user data

Police Stops - https://policestops.herokuapp.com - github

- · WebApp that allows that user to easily query and visualize traffic stops in the state of Florida
- Queries a postgreSQL database with 5,421,446 rows to generate a heatmap with Leaflet.js

Multiplayer Monopoly Game in Java

 $\bullet~$  A four student collaborative, semester-long project to practice the waterfall design process

#### **EXPERIENCE**

## Natural Language Processing TA Introduction to Artificial Intelligence TA

February 2018 - May 2018 February 2017 - May 2017

New College of Florida - Sarasota, FL

Provide TA sessions and office hours to answer questions and grade papers

# **Data Science Internship**

March 2017 - August 2017

Star2Star - Sarasota, FL

- Created a ChatBot for troubleshooting IoT devices with customers using NLP techniques
- Used Word2Vec on internal documentation to generate links between synonyms
- Used Gensim as a fallback for providing URLs to relevant documentation
- Detected remote phone failures using Time-Series Analysis for anomaly detection

#### **Software Engineer Coop**

January 2015 - August 2015

Sub-Zero - Madison, WI

- Normalized MySQL database and converted VB.NET automated tests into LabVIEW
- Reverse-engineered undocumented trolleys to isolate the problem and increase uptime
- Created a user-friendly GUI for reporting manufacturing issues to minimize user error

EXTRA-CURRICULAR Deans List International Student Club 2014