**Alex Preston**

3140 Dyer St. #5253 Dallas, TX · apreston@smu.edu · 321-749-2467 · github.com/alexrpreston **EDUCATION**



**Southern Methodist University**



**Lyle School of Engineering, Dedman College of Humanities**

*Bachelor of Science, Computer Science; Bachelor of Science, Statistics*

Dallas, TX May 2022

* Cumulative GPA: 3.2/4.0
* College tuition paid for through *Second Century Scholars Program* (merit-based scholarship)

**SKILLS & INFORMATION**

**Computer:** Python, Django, C++, Java, Git, Javascript, Adobe Photoshop, Adobe Premiere Pro CC



**Interests:** natural language processing, deep learning, blogging, running, cooking, books

**WORK EXPERIENCE**



**Securboration** Melbourne, FL*Development Intern* May 2019 - June 2019

* Created novel Python micro-service to automatically find nearest weather station (including redundancy checking when data was not available)
* Fetched weather data from government API based on plane crash date and location resulting in Excel report
* Performed data cleanup in Python to increase quality of weather station data by removing fuzzy duplicates, removing unnecessary columns, and manipulating data when needed
* Worked with web designer to enhance front-end design of search engine to make tool more user-friendly

**JM Real Estate** Melbourne, FL*Real Estate Intern* Nov 2016 - June 2017

* Recorded and edited aerial footage of real estate properties using DJI Phantom 4 and Adobe Premiere Pro to be used in company website and marketing materials
* Created spreadsheet to analyze timing and payment of invoices to ensure on-time collection
* Designed and created promotional fliers to be used in company website and marketing materials

**PROJECTS**



**News Aggregator** Melbourne, FL*Personal Project* January 2020

* Created a content aggregator in Python and Django to scrape headlines from various news sites to create a curated news site.
* Automated back-end tasks to have scrapers continuously pull new headlines in real time.

**Supreme Court Search Engine** Dallas, TX*Course Work* November 2019 - December 2019

* Designed the architecture and wrote a search engine in C++ using an inverted file index
* Implemented Boolean operators for query processing of user input.
* Parsed input JSON files and law documents were returned using frequency ranking.

**Autonomous Robot** Dallas, TX*Course Work* January 2019 - May 2019

* Designed and created robot capable of competing in obstacle course, including temperature sensing, conductivity testing, object collection, and movement
* Responsibilities included frame construction and electrical wiring of robot
* Performance of robot resulted in placing 2nd out of 14 total teams competing in obstacle course

**LEADERSHIP & COMMUNITY SERVICE**



**Robotics Club** Dallas, TX*Member* January 2020 - Present

* Creating image collection system with Python and Django to extract data from autonomous drone to then automatically sort images based on size, orientation, color, and shape