

## Antonio Mendoza

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### Relevant Education:

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**University of North Carolina, Chapel Hill:** B.S. in Comp. Science; **Graduating: May, 2022**

- **Relevant Courses:** Machine Learning, Linear Algebra, Combinatorics, Methods of Data Analysis, Discrete Math, Multivar. Calc, Data Structures
- **Scholarships:** Hispanic Scholarship Fund, Tar Heel Merit Scholarship

### Experience

 Github: <https://github.com/eltoto1219>

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**URGD. Research Assistant (PI: Mohit Bansal; UNC-NLP lab)**

*Fall 2019 - Present*

- Implementing a visual question answering system with advanced neural modeling between multiple modalities.
- Utilizing advanced modeling techniques such as deep question-image co-attention, and commonsense reasoning with neural modules.
- Implementing novel ideas to surpass state-of-the-art results with a corresponding published paper and submitting to conferences.

**Fidelity Investments - Software Engineering**

*Durham, NC: Summer 2019*

- Programmed a health dashboard that linked all company products all the way down to the network infrastructure level through recursive searches in python utilizing multiple relational databases
- Ability to link products, applications, and servers in conjunction with problems specific to each in record time
- Location of problem areas within a product can be found almost instantly for teams to troubleshoot by performing a health search in my application

**The Jackson Laboratory Summer Student Program**

*Bar Harbor, ME: Summer 2018*

- Identified candidate miRNAs that could be used as circulating biomarkers and/or therapeutic targets in non-small cell lung cancer using PDX mouse models in combination with high throughput sequencing data.
- Automated miRNA alignment to a reference database on a **HPC**
- Created a multi-script program for data acquisition, filtering, and computation

### Projects

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**Natural Language Processing with Deep Learning CS224N**

*Online: Spring 2019*

- Utilized single end-to-end neural models that without feature engineering
- Through the assignments, I have visualized word embeddings, recreated the W2V model, and programmed both an English dependency parser and a Bi-LSTM with attention for machine translation
- Translate recent NLP/AI research publications into code

**Pack Hacks Hackathon**

*NC State, NC: Spring 2019*

- Created a web application, CarolinaSwipe, so that UNC students could sell their swipes <https://carolinaspwipes-44d75.firebaseio.com/>
- Utilized a No-SQL database, Firebase, and Material Design for the UI
- Constructed and in-house chat functionality between users for meal-selling interactions

**Amazon Alexa Skill National Hackathon**

*Spring 2019*

- **Honorable Mention** - <https://amzn.to/2kdSkyf>

## **Antonio Mendoza**

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### **Professional Skills:**

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#### **Programming and Statistics**

- Languages: Python (**PyTorch**) (**TensorFlow**), R, JavaScript, LaTeX (Proficient), Java, C (Novice)
- Other: shell scripting, HTML, CSS (Novice), SQL (Experience), GIT, REST, AWS
- Strong understanding of Linear/Logistic Regression, ANOVA, and many statistical ML models.

#### **Teamwork and Independence**

- Hosted Java classes for new students on my robotics team
- Teach music theory and classical guitar to children through Musical Empowerment
- Computer Science Student ambassador 2019-2020: Assist with external relations, serve as liaison for visiting companies, and work with a diversity of students to involve them in Comp. Sci.