# Carlos A. Samaniego

10952 Crescendo Circle | Boca Raton, FL 33498 | samaca 16@wfu.edu | 561-358-1924

# **EDUCATION**

Wake Forest University

Winston-Salem, NC

Bachelor of Science in Computer Science Major GPA: 3.29: Upsilon Pi Epsilon May 2020

#### **SKILLS**

- Technical: Python, Java, C++, SQL, JavaScript, HTML, CSS, Swift, Linux/Unix, GraphQL, Docker
- Frameworks: AWS Amplify, Flask, Django, ReactJS
- Fluent in Spanish and English

#### **PROJECTS**

# **Cyber Security Tools**

Crypt-Breaker (Cipher Tools)

- ROT#: Python script that allows for encryption and decryption of text by utilizing every variation of the ROT method
- Frequency Analysis: Script that finds the ratio of characters used and allows substitution for decrypting given cipher text
- RSA Tool: Python Script that utilizes modular exponentiation to encrypt and decrypt data based on the principles of RSA

# **NBA Live Projections Web Application**

Flask Application

- Built a Flask application to project current day predictions of NBA matches by web-scraping three years of NBA related data
- Implemented own feature selection algorithm using R-Squared values and compared its Average Cross Validated Mean Squared Error (ACVMSE) to other regression algorithms such as Gradient Boosting, KNN, Multi-Linear, and Decision Tree
- Designed the website's front end by using HTML, CSS, and Python using Flask's Jinja Templating engine

#### PROFESSIONAL EXPERIENCE

Ernst & Young Charlotte, NC

Technology Advisory Intern

June 2019 – August 2019

- Worked within the enterprise architecture team to map 1,800 data integrations
- Developed the backend of a ReactJS web application using AWS Amplify, GraphQL, and DynamoDB, which acts as a centralized repository for data and integration information
- Wrote a python script that processed actuarial documents containing up to 26,000 comma separated values

Apptical Corp. Boca Raton, FL

Software Engineering Intern

*May 2018 – July 2018* 

- Processed client data into proprietary software to provide individual product recommendations for life insurance companies
- Collaborated with a team of 15 employees to facilitate the customer acquisition cycle by performing 100+ interviews
- Analyzed JavaScript and C# scripts to find and document bugs and suggested features for future deployment
- Gained an understanding of Databases and SQL by generating queries to retrieve product and client data for analysis

## **Wake Forest University Athletics**

Winston-Salem, NC

Captain Student Manager of the Women's Soccer Team

August 2016 – Present

- Work weekly to improve ease of operations as well as aid in player development and skills training on the soccer field
- Filmed NCAA Division I ACC and non-conference matches for the benefits of the players and statistical analysis

## **LEADERSHIP ACTIVITIES**

## **Organization of Latin American Students (OLAS)**

Winston-Salem, NC

Treasurer

*August 2016 – January 2019* 

- Proposed and managed a \$1000+ budget and generated reports for Student Budget Advisory Committee
- Organized campus-wide events, such as Hispanic Heritage Month celebrations, to increase awareness of Latinx culture
- Act as a liaison to advise the current treasurer with respects to financial duties and decisions in the organization

#### Wake Forest University Water Polo Club

Winston-Salem, NC

Spring 2019 – Present

Secretary & Team Co-Captain

- Devoted six hours a week to training and scrimmaging local colleges and universities
- Within 1 year of the club's founding, we upset JMU and UNCW to come in 5<sup>th</sup> place at Los Lobos Tournament at NC-State

#### **American Martial Arts Academy**

Winston-Salem, NC

Brazilian Jiu Jitsu Athlete

June 2016 – January 2019

- Committed six hours a week to training and attended local and international Brazilian Jiu Jitsu tournaments
- Promoted an atmosphere to interchange self-defense knowledge between students and instructor