

Natalia Valencia

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SUMMARY

- Undergraduate student with experience in deep learning frameworks such as MXNet and Spark
- Research interests in machine learning, parallel computing, data storage systems, and memory optimization.
- Experience in C, Java, and Python.
- Looking for a summer internship.

EDUCATION

B.A. in Computer Science Florida International University, USA. CGPA: 3.3/4.0	May 2021
B.A. in Liberal Studies with a concentration in Humanities and Cultural Traditions Florida International University, USA. CGPA : 3.0/4.0	May 2016
High School Diploma in College Prep Cypress Bay High School, USA. CGPA: 3.0/4.0	May 2011

RESEARCH EXPERIENCE

Student Research Assistant Florida International University	June 2020 - present
<ul style="list-style-type: none">• Deploying machine learning frameworks like MXNet and Spark to analyze tuning components and internal parameter techniques in distributed systems.• Provided a graphical analysis of tuning components and internal parameters based on latency, memory usage, and execution memory usage.• Reading and understanding technical top-quality published research papers.• Collaborating with PhD and undergraduate students to formulate better data management techniques.	
Research Assistant Bakehouse Art Complex	July - Dec. 2016
<ul style="list-style-type: none">• Led research-based projects to collaboratively produce strategies in the management and preservation of artwork.• Interacted with award winning artists on a daily basis to eradicate any impending issues regarding exhibitions.• Participated in artist led talks and managed seating arrangements.	

ADDITIONAL EXPERIENCE

Grader, Programming I and Programming II Florida International University	Jan. 2018 – May 2020
<ul style="list-style-type: none">• Graded coding assignments that dealt with polymorphism, inheritance, recursion, primitive data structures, and syntax errors.• Interacted with students to resolve their queries on assignments.	
Miami Film Society Intern Miami International Film Festival	Jan. - May 2017
<ul style="list-style-type: none">• Managed and maintained a database of Miami Film Society Members.• Handled crowd control and accounted for the attendance of Miami Film Society Members at each screening.	

- Coordinated seating arrangements at select venues.

PROJECTS

- **ML analysis on Memory Management in Distributed Systems**

Deploying machine learning frameworks with varying tuning parameters to analyze memory utilization and memory management .

- **Wireshark Lab: Analyze Hypertext Transfer Protocol (HTTP/HTTPS)**

Used Wireshark to analyze Hypertext Transfer Protocols in action. Explored several aspects of the HTTP/HTTPS protocol in detail: the basic GET/response interaction, HTTP message formats, retrieval of large HTML files, retrieval of HTML files with embedded objects, and HTTP authentication and security.

- **Wireshark Lab: Analyze Transmission Control Protocol (TCP)**

Investigated the behavior of TCP in detail. Analyzed traces of TCP segments. Studied TCP's use of sequence and acknowledgement numbers for providing reliable data transfer.

COURSES

- **Computer Systems:** Operating Systems
- **Artificial Intelligence:** Intro to Data Mining
- **Database:** Intro to Database Systems
- **Programming:** Systems Programming, Data Structures, Discrete Structures
- **Computer Architecture:** Computer Organization,
- **Cyber Security:** Telecommunication Networking, Telecommunication Network Security, Ethical Hacking, Digital Forensics

TECHNICAL SKILLS

General programming: C, Java, Python

Operating Systems: Windows 10/8/7, Kali Linux, Ubuntu

Misc. : MIPS, Verilog, Adobe Software Suite

ADDITIONAL SKILLS

- **Bilingual**
- **Team Player**
- **Active Listener**
- **Critical Thinker**
- **Problem Solver**
- **Detail Oriented**