

# ERNESTO GARCIA VAZQUEZ

9293 SW 39<sup>th</sup> Street • Miami, FL 33165  
linkedin.com/in/erngvq • github.com/erngvq  
(786) 768-1317 • erngvq@gmail.com

---

## EDUCATION

---

UNIVERSITY OF NORTH CAROLINA – Chapel Hill, NC Aug 2018 – May 2021

*B.S. in Computer Science*

- The Carolina Covenant Scholarship, Chancellors Access NB Scholar, Jimmie Norris Scholarship
- **Organizations:** UNC Developer Student Clubs (Core Team), Web Dev Carolina
- **Cumulative GPA:** 3.939
- **Relevant Coursework:** Data Structures, Algorithms, Probability, Machine Learning, Digital Logic and Computer Design, Operating Systems, Modern Web Programming, Files and Databases, Bioalgorithms

MIAMI DADE COLLEGE, THE HONORS COLLEGE – Miami, FL

Aug 2016 – Aug 2018

*A.A. in Computer Science*

- **Organizations:** Engineers For A Sustainable World (Core Team), Phi Theta Kappa Honors Society
- **Cumulative GPA:** 4.000; Dean's List
- **Relevant Coursework:** Multivariable Calculus, Linear Algebra, Discrete Mathematics, Programming

## SKILLS

---

- **Programming Languages:** C/C++, Python, Java, JavaScript
- **Web Development:** React, HTML, CSS, Firebase, Material-UI
- **Other Technical Skills:** MIPS Assembly, SystemVerilog, Linux, SQL, NoSQL, Git
- **Languages:** English, Spanish, Portuguese

## PROJECTS

---

MIPS SINGLE CYCLE PROCESSOR

Jan 2021 – Apr 2021

- Implemented a single-cycle processor using SystemVerilog, and developed an assembly language application to demonstrate the functionality of the processor and input/output devices.

DTRACKER, A TRACKING SYSTEM FOR ONLINE SUCCESS 📧

Sep 2020 – Dec 2020

- A truck-tracking delivery system for small transportation businesses, in an effort to ameliorate the traditional paper-based systems that many of these small companies rely on.

THE CORONAVIRUS QUERIES 📧

Aug 2020 – Dec 2020

- Worked on a series of COVID-19-related problems that emphasized both the foundations and applications of databases, as well as their implementation—mainly using SQL and Python—and optimization (i.e., indexing, efficient query evaluation, and the transaction-based model).

THE TAR HEEL SHELL 📧

Aug 2020 – Oct 2020

- Implemented a mini-shell with basic operations to become familiar with low-level Unix/POSIX system calls related to process and job control, file access, and IPC (pipes and redirection).

QUESTION GENERATION IN AN EDUCATIONAL CONTEXT 📧

Feb 2020 – May 2020

- Addressed a particular area of question generation by taking a state-of-the-art model in supervised question generation and applying it to an educational dataset.

## PROFESSIONAL EXPERIENCE

---

UNIVERSITY OF NORTH CAROLINA – Chapel Hill, NC

Aug 2018 – Feb 2021

*Mathematics/Computer Science Tutor*

- Tutored at both the Math Help Center and the Learning Center for different Mathematics and Computer Science courses offered at the university. Courses included Multivariable Calculus, Discrete Mathematics, Computer Organization, Programming Foundations, and Data Structures and Algorithms.

MIAMI DADE COLLEGE – Miami, FL

Jan 2018 – Aug 2018

*Mathematics/Programming Tutor*

- Mentored and assisted students in different courses through interactive discussions and review sessions. Courses included Calculus One and Two, Discrete Structures, and Introductory C/C++ Programming.