

# Andrea Arturo Venti Fuentes

[in /andrea-venti/](https://www.linkedin.com/in/andrea-venti/) [\(954\) 952-2239](tel:(954)952-2239) [andreaventi.com](https://www.andreaventi.com) [contact@andreaventi.com](mailto:contact@andreaventi.com) [av1155](https://github.com/av1155)

## EDUCATION:

**Bachelor of Science in Computer Science, Minor in Mathematics**

*University of Miami (UM), Coral Gables, FL*

Spring 2023 – Fall 2025

GPA: 3.69 / 4.0

## RELEVANT COURSEWORK:

Data Structures & Algorithm Analysis | System Programming | Computer Organization & Architecture | Computer Programming I & II | Discrete Mathematics | Probability and Statistics | Linear Algebra | Calculus I & II | Python Programming | Harvard CS50: Introduction to Computer Science

## PROFESSIONAL EXPERIENCE:

**Explore Program Manager, INIT University of Miami Chapter**

*UM, Coral Gables, FL*

April 2024 – Present

- Tailored technical workshops to enhance the career readiness of University of Miami students.
- Promoted inclusivity by offering resources to enhance skills and diversify tech.

**Career Development and Outreach Chair, Google Developer Student Clubs**

*UM, Coral Gables, FL*

May 2023 – May 2024

- Led technical workshops and events, improving practical tech skills.
- Fostered career growth and inclusivity through partnerships and outreach.

## PROJECTS:

**[FlaskKeyring](#)** // Python, Flask, JavaScript, PostgreSQL, HTML/CSS, Bootstrap, jQuery, Heroku

- Developed a full-stack password manager, demonstrating expertise in both frontend and backend development.
- Integrated Flask with PostgreSQL for secure data handling, implementing Fernet encryption for data protection.
- Implemented features like user authentication, password reset, and email verification using Flask-Mail.

**[IndexNet-Engine](#)** // Java, Algorithms, Data Structures, PageRank, Web Crawling

- Built a Java-based search engine simulation with web crawling and page ranking algorithms.
- Utilized B-Trees for efficient data indexing and external sorting techniques for large datasets.
- Applied the PageRank algorithm to rank pages by relevance, showcasing advanced algorithmic concepts.

**[The .dotfiles Project](#)** // Git, Bash, Zsh, macOS, Linux, Shell Scripting

- Developed a cross-platform, architecture-aware solution to automate development environment setups across macOS, Arch Linux, WSL, and Debian using universal shell scripts for dynamic configuration.
- Automated the installation, management, and configuration of development tools and system settings, significantly enhancing productivity and reducing setup time.

**[Portfolio Website](#)** // Next.js, TypeScript, Tailwind CSS, Vercel

- Created a responsive portfolio website to showcase projects, skills, and experience.
- Built with Next.js and TypeScript, incorporating modern web development practices.
- Implemented dynamic animations and contact form integration to enhance user engagement.

## SKILLS:

**Programming Languages:** Java, Python, C/C++, JavaScript, TypeScript, Bash, Lua

**Web Technologies:** Next.js, Bootstrap, Tailwind CSS, Flask, jQuery, AJAX, Jinja2, HTML/CSS

**Frameworks & Libraries:** SQLAlchemy, Matplotlib, NumPy, Pandas, Streamlit | **APIs:** Twilio, OpenWeather, IEX

**Databases:** PostgreSQL, SQLite | **Tools & Platforms:** Git, Docker, Jupyter, Vercel, Heroku, Netlify, Raspberry Pi

**Operating Systems:** Linux (Debian, Arch), macOS, Windows | **Languages:** Fluent in Spanish and English

## HONORS & AWARDS:

**University of Miami:** Provost Honor Roll (Spring 2023) & Dean's List (Spring 2023, Fall 2023), UHack Hackathon 2nd Place (Spring 2023) – [PlanetPath](#)