

Contact

- ☎ 586.214.8304
- ✉ mraediaz@gmail.com
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 - linkedin.com/in/m-diaz
 - github.com/mraediaz

Melany Diaz

I am a double major in computer science and mathematics with diligent training in software development and engineering, object oriented design, and pure mathematics. I am an independent and thorough worker, that also thrives as part of team. Speaking three languages fluently has taught me how to explain, understand, and conceptualize complex concepts into simple explanations.

Education

Kalamazoo College

BA in Mathematics & Computer Science (Honors)

Cum Laude, GPA 3.6

Sept 2012 - Jun 2016

ESC Clermont: France Business and Marketing School

French Language, Culture, Marketing

Aug 2014 - Feb 2015

Goodrich High School

Summa Cum Laude, GPA 3.9

September 2008 - June 2012

Skills & Languages

Object-Oriented Programming,
TexStudio, Overleaf, JabRef, Android
Studio, Eclipse, IntelliJ, Adobe Muse,
Github, QLab Show Control,
Raspberry Pi, Sound Engineering,
Software Engineering

English (Native)
Spanish (Native)
French (Proficient)

Java (Proficient)
TexWorks/LaTeX (Proficient)
C (Previous Experience)
Python (Previous Experience)

Activities & Awards

- Fire and Circus Performance
- Learning new languages
- GISMO (Girls Investigate Science and Math Opportunities) Volunteer
- Richard T. Hough SIP Award

Projects

We Remain Website Developer

Nov 2016 - Present

- Created, designed, and currently maintain a responsive mobile and desktop website for an organization of volunteers gathering resources for well-known non-profit organizations.

SUKUMA Founder and Mentor

Sept 2014 - Present

- Established and managed a chapter of SUKUMA for underrepresented students in STEM, providing a supportive community to encourage 17 at-risk minority students to continue their educations and professions in computer science, engineering, physics, and mathematics.

Women in Computer Science Senior Individual Thesis

May 2015 - May 2016

- Undergraduate thesis proposal, report and final presentation regarding the importance of women in computer science, disparities caused by discrimination, and the success rate of various strategies commonly used to encourage gender diversity in technology. Since graduation thesis has been petitioned nine times to source in academic research and other projects.

Analysis of Sorting Algorithms Three Research Papers

Jan 2015 - Apr 2015

- Created and implemented a program using Insertion, Merge, and Quick Sort algorithms to analyze, validate and compare their run-time complexity behaviors when sorting arrays of size n .

Kalamazoo College App Java Mobile Application Developer

Sept 2015 - Dec 2015

- Developed and proposed a mobile application for campus orientation to help new students. The application was used as a prototype for the college's official mobile app.

Work Experience

Brand Ambassador

2013 - Present

Encore Nationwide, Victory Marketing, Modern Promotions

- Collaborate closely with team members to ensure completion of each promotion. Each successful activation guarantees one-on-one positive interactions with 150-700 customers within 6 hours.

Research Assistant

2012 - 2015

- Provided advance research on illegal and illicit cigarette sales by contacting pertinent government departments and conducting systematic internet searches to collect over 3,000 data points concerning relevant state and tribal tax codes, revenues, and laws. Dataset was then compiled and organized to facilitate further research and analysis.

Teacher Assistant, Tutor, and Consultant for Calculus I and II,

2012 - 2016

Algebra, Number Theory, Intro to Programming and Intro Pictures and Sounds

Department of Mathematics and Computer Science, Kalamazoo College

- Coordinated after school tutoring hours with individual and small groups to provide students supplemental assistance. Examples include: Providing Spanish translations to non-English speaking students, working with a student's special need, and visualizing mathematical abstractions.