

Miguel Velez

Skills

Java, Python, C#, MySQL, Unity

Education

University of St. Thomas

Computer Science

Fall 2010 – Fall 2015

Minor: Physics

GPA: 3.99/4.00

CISC/MATH GPA: 4.00

Summa Cum Laude *Current and Future Relationships Between Robots and Humans*

Relevant coursework: Data Structures, Algorithms, Databases, OS, Networking, Architecture, AI & Robotics, Information Security, Applied Statistics, Multivariable Calculus

Work Experience

Research Intern – Massachusetts Institute of Technology

June 2015 – August 2015

- Implemented features in Sketch that increased its expressiveness and made it more powerful.
- Simpler Implementation of Sketches through Enhanced Expressiveness *MIT Summer Research Poster Session 2015.*

Application Developer/Software Engineer – Sportradar US

February 2015 – Present

- Developed Ruby monitoring applications to parse and build Major League Baseball and Formula 1 feeds.

Computer Science Undergraduate Research Student – UST

August 2014 – Present

- Parallelized sequential reachability algorithms to increase the efficiency of analyzing source code.
- Enhanced WAH compression technique to query faster and more efficiently with two sets of metadata.
- Faster WAH Compression Querying through the use of Metadata *CCSC:MW 2015. 1st place Discovery Track.*

Computer Science & Chemistry Undergraduate Research Student – UST

February 2014 – May 2014

- Implemented a programming language that analyzed user input related to organic chemistry.
- Extending SMILES to Encode Reaction Mechanisms *Inquiry at UST, May 2014.*

Cloud Developer Intern – Valtira, LLC

February 2013 – January 2015

- Implemented and maintained web applications with Java servlets, AngularJS, and MySQL databases.

Side Projects

dsa

Implementation of data structures and algorithms

Cubie Cruiser

2D endless runner game focused on avoiding obstacles

cstats

Generator of file system statistics

Personal Backup

Software tool to backup folders and files

Urban Tennis

First full game published for the web

Unity Game Development Manual

Guide of the basics of Unity game development

Honors and Recognitions

MSRP Research Internship at MIT 2015 (10.5% acceptance rate)

CCSC:MW 2015 1st place Student Posters & Showcase Discovery Track 2015

UST Student Travel Grant 2015

UST Collaborative Inquiry Grant 2014, 2015

International Student Leadership Scholarship 2012

Bev and Pat Flaherty Scholarship 2011 – 2014

University of St. Thomas International & Tuition Scholarship 2010 – 2015

American Field Service International Scholarship 2008 – 2009

Activities

Game Design Club 2014 – Present

Computer Science Consultant 2012 – Present

Computer Science Club 2011 – Present

Globally Minded Student Association 2010 – Present

Note taker 2013, 2015

STAR President 2012 – 2013

2 STEM Learning Communities 2011

Spanish Tutor 2010 – 2012

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