

# Miguel Velez

**Website** [mijecu25.com/miguelvelez.html](http://mijecu25.com/miguelvelez.html)  
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**GitHub** [github.com/miguelvelezmj25](https://github.com/miguelvelezmj25)

## Skills

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Java, C#, Python, SVN, MySQL, Unity, Ruby

## Education

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**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 and Robotics, Information Security, Applied Statistics, Multivariable Calculus

## Work Experience

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**Research Intern – Massachusetts Institute of Technology** June 2015 – Present

- Joining Prof. Armando Solar-Lezama's CAP research group to develop tools and techniques that exploit computing power to help programmers tackle programming problems.

**Computer Science Undergraduate Research Student – UST** August 2014 – Present

- Enhanced WAH, EWAH, and VAL compression techniques to query faster and more efficiently with metadata.

**Jr. Application Developer – Sportradar US** February 2015 – May 2015

- Developed Ruby applications to monitor and parse sport feeds using JRuby.

**Cloud Developer Intern – Valtira, LLC** February 2013 – January 2015

- Implemented and maintained Web Applications with Java servlets, AngularJS, and MySQL databases.

**Computer Science & Chemistry Undergraduate Research Student – UST** February 2014 – May 2014

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

## Side Projects

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<b>dsa</b> Implementation of data structures and algorithms	<b>Personal Backup</b> Software tool to backup folders and files
<b>Cubie Cruiser</b> 2D endless runner game focused on avoiding obstacles	<b>Urban Tennis</b> First full game published for the web
<b>Space Protector</b> Space shooter game soon to be published on Android	<b>Unity Game Development Manual</b> Manual describing the basics of Unity game development using the editor and scripting

## Honors and Recognitions

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**MSRP Research Internship at MIT** 2015  
**UST Collaborative Inquiry Grant** 2014, 2015  
**International Student Leadership Scholarship** 2012  
**Bev and Pat Flaherty Scholarship** 2011 – 2014  
**Dean's Honor List** Fall 2010 – Present  
**University of St. Thomas International & Tuition Scholarship** 2010 – Present  
**American Field Service International Scholarship** 2008 – 2009

## Activities

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<b>Game Design Club</b> 2014 – Present	<b>STAR President</b> 2012 – 2013
<b>Computer Science Consultant</b> 2012 – Present	<b>2 STEM Learning Communities</b> 2011
<b>Computer Science Club</b> 2011 – Present	<b>Morrison Hall Council</b> 2010 – 2011
<b>Globally Minded Student Association</b> 2010 – Present	<b>Spanish Tutor</b> 2010 – 2012