

# Miguel de Arcos

Mechatronics Engineering BAsC



[migdea11.github.io](https://migde11.github.io)



[migdea11@gmail.com](mailto:migde11@gmail.com)



(519) 502-1887

## WORK EXPERIENCE

**Software Engineer** — *Sandvine Inc.*, Waterloo, ON

MAY 2016 – OCTOBER 2017

- Designed and implemented sensor caching infrastructure to replace old non-thread safe predecessor
- Developed driver for new PMBus compliant voltage regulators
- Implemented a hardware switch driver

**Hardware Engineer** — *Evertz Microsystems*, Burlington, ON

MAY 2015 – AUGUST 2015

- Designed schematics for a high-performance transfer board
- Executed design changes and part substitutions in schematics

**Software Team Lead** — *Hansa Language Centre*, Toronto, ON

SEPTEMBER 2014 – DECEMBER 2014

- Supervised and led development team in designing internal Django web-app
- Discussed requirements with stakeholders and kept them apprised of progress
- Developed action plans for the team and individuals in order to accomplish long-term and short-term goals

**Software Developer** — *EVault*, Oakville, ON

JANUARY 2014 – APRIL 2014

- Worked with minimal supervision from supervisor
- Updated vSphere SDK within the Virtual Recovery Agent, modified several code generating scripts in the process, and added SATA drive recovery
- Used the vSphere environment daily, creating and managing various VMs

**R&D Team** — *Protecode*, Ottawa, ON

JANUARY 2013 – SEPTEMBER 2013

- Redesigned the report generation infrastructure
- Brainstormed ideas to increase QA automation

**Student Engineer** — *MCW Maricor*, Moncton, NB

JANUARY 2011 – APRIL 2011, SEPTEMBER 2011 – DECEMBER 2011

- Worked extensively on autoCAD, creating mechanical drawings for construction projects
- Designed HVAC and plumbing layouts

## EDUCATION

**University of Waterloo**, Waterloo, ON — *Mechatronics Engineering, Honours, Co-operative Program*

SEPTEMBER 2010 – MAY 2016

## COMPUTER SKILLS

**Programming:** C/C++, Python, Bash, Java, Matlab, SQL, PostgreSQL

**Revision Control:** SVN, Git, Perforce

**Issue Tracking:** Jira

## PROJECTS

- Self-Balancing Autonomous Robot
- Six Degrees of Freedom Controller
- Lego Man Retrieval Robot

For a detailed description of all my projects, visit my website

[migdea11.github.io](https://migde11.github.io)

## LEADERSHIP

Led the software team at Hansa to modernize the company website

SEPTEMBER 2014 – DECEMBER 2014

Organized hockey practices and advised the team during games as an assistant coach at Midget AA level

SEPTEMBER 2011 – DECEMBER 2011

## SCHOLARSHIP

**President's Scholarship** —

*University of Waterloo*,  
Waterloo, ON

SEPTEMBER 2010

## LANGUAGES

English, French, Spanish