Carlos Asmat, Jr. Eng.

Montreal (Quebec) H3X 1J4
carlos.asmat@mail.mcgill.ca
carlitoscontraptions.com

Summary

I am a highly motivated junior Electrical Engineer specialized in Control & Automation , and Power Engineering. I possess advanced hardware and software skills, a substantive work experience, teamwork and communication skills, and a keen interest in electronics and creative work.

Education

BACHELOR IN ELECTRICAL ENGINEERING – CONTROL & AUTOMATION – POWER
McGill University: August 2004 - May 2008.

INTERNATIONAL BACCALAUREATE – DEC
CEGEP André-Laurendeau: 2002 – 2004.

INTERNATIONAL HIGH SCHOOL DIPLOMA
École Internationale de Montréal: 1999 – 2002.

Skills

Language
Proficiency in writing and speaking
Spanish, French, and English.

Engineering Tools
VHDL · Quartus · ISE
PSpice · EMTP-Works
Autocad · Microstation · SolidWorks
POSPac · SoftNav · OPC
Omron CX-One

General Computing
C · Java · Assembly · Python · Qt
OpenOffice.org · MS Office
Gimp · Inkscape · Photoshop · Illustrator
3ds max · SketchUp
Maple · Matlab · Simulink
Linux · Windows

Work Experience

Directec
AUTOMATION INTERN – May 2009 until present.
- Assisted in the development of automation programs for industrial laundry systems.
- Retrofit Fanuc S420F robotic arms with new controllers in oder to produce industrial automation applications.

Panaxion
Jr. PROJECT ENGINEER – April 2009 until present.
- Participated in the electrical and mechanical design of an end-user paint application system.
- Assisted in the mechanical design of a paint blending device.
- Assisted in the colour blending software design.

Orthodontie Plus
WEBMASTER – March 2009 until present.
- Designed, deployed and maintained a corporate website: orthodontieplus.com
- Provided an email, calendar and document management solution for the staff.

Montreal (Quebec) H3X 1J4
carlos.asmat@mail.mcgill.ca
carlitoscontraptions.com

PHB Group

FIELD PROFESSIONAL – September to November 2008

- Verified and adjusted aerial pictures for correctness and suitability for the client's needs.
- Planned and conducted aerial photographic and LiDAR topographical surveys.
- Operated the Vexcel camera, the Optec LiDAR, and high precision GPS units at various Quebec locations and at Lagos, Nigeria.
- Acted as the team leader in a one-month-long Nigerian mission.

McGill University

CHEMISTRY LABORATORY RESEARCH ASSISTANT – Summer 2008

- Redesigned the Atmospheric and Interfacial Chemistry Research Group web site.
- Designed and conducted an experiment aiming to measure CO_2 absorption by carbon nanoparticles.

DIGITAL SYSTEM DESIGN TEACHING ASSISTANT – Winter 2008

- Leaded 2-hours tutorial sessions for a group of around 40 students.
- Answered questions, and provided useful examples and advise regarding theoretical and practical digital system design problems.

Ville de Montréal

GEOMATICS TECHNICAL AGENT – Summer 2007

- Researched and developed various ways of displaying 3D architectural data.
- Helped document the 3D modelling process.

GEOMATICS TECHNICAL AGENT (STUDENT) – Summer 2006

- Reorganized and thoroughly documented the Old Montreal 3D model set.
- Helped in the development of a standard classification system for 3D models according to their level of detail.

Inner City Day Camp

SHADOW – Summer 2005

- Assisted a mentally disabled child to participate in the camp activities.

ASSISTANT COUNSELLOR – Summer 2003

- Assisted a Camp Counsellor with the various camp activities and games.

Other Achievements

Les Fonds Équateur: CEGEP André-Laurendeau – May 2009 until present.

- Deployed a forum enabling team member to exchange information and organize activities: ecuador.carlitoscontraptions.com
- Provided guidance for students deploying alternative energy systems in Ecuador.

McGill Autonomous Robotics Team: McGill University – April 2008 until present.

- Acted as an external technical consultant for the team.
- Developed a low level control system for MARTy, the McGill AUV.

Lunar Excavator Team: McGill University – Summer 2008

- Integrate the excavator controllers and sensors in a single circuit board.

Carlos Asmat, Jr. Eng.

Montreal (Quebec) H3X 1J4
carlos.asmat@mail.mcgill.ca
carlitoscontraptions.com

Carlitos' Contraptions Website: carlitoscontraptions.com – 2006 until present.

- Maintained a website documenting my do-it-yourself electronics projects.

CS Games: Laval University – March 2005.

- Participated in an interuniversity computer science competition.
- Designed the McGill team logos.

Humanitarian Trip: Ecuador – December 2003.

- Participated in a trip to Ecuador to help the needy indigenous people.
- Installed the computer systems brought to the Ecuadorians.
- Designed and constructing two bunk beds with local materials.
- Translated and helped in the communication between the Canadians and Ecuadorians.

IB Website: CEGEP André-Laurendeau – 2002 to 2003.

- Designed and maintained the International Baccalaureate website.

EIM 3D replica: École internationale de Montréal – 2001.

- Created a photorealistic interactive replica of the interior of the EIM using the Half-Life 3D engine.

References available on demand.