

Michael Yousif Yousif Morckos

CONTACT INFORMATION	Current residence: Columbia Street West, Waterloo, Ontario Canada N2L 6P7 Voice: +1 519 781 2043 E-mail: mmorckos@uwaterloo.ca
PURPOSE	Apply for a dynamic job/training position in the field of Software Engineering/Information Technology where I can prove myself a valuable asset and foster my skills and experience
INTERESTS	Mobile and desktop development, Systems programming, Open Source software development, Agent-based and autonomous systems, Game programming, Compilers, Abstraction and minimalism
EDUCATION	University of Waterloo , Waterloo, Ontario Canada 2010 - 2012 (expected) MAsc., Electrical and Computer Engineering. German University in Cairo (GUC) , Cairo Egypt 2004 - 2009 B.Sc., Computer Science and Engineering, Spring 2008. <ul style="list-style-type: none">• Thesis title: Reinforcement Learning-based Elevator Dispatching• Grade: Excellent Cumulative grade: Very good
AWARDS AND SCHOLARSHIPS	Graduate Research Studentship (GRS), \$16,500 per year International Master's Student Award, \$4,785 per year
PREVIOUS EXPERIENCE	International Turnkey Systems (ITS) , Cairo Egypt <i>Software Developer Intern</i> July 2008 to September 2008 <ul style="list-style-type: none">• Worked with JSF, Oracle TopLink, Oracle DB.• Conducted a presentation on TopLink. National Societe Generale Bank (NSGB) head office, Cairo Egypt <i>IT Help Desk Intern</i> August 2007 to September 2007 NorGlobe , Cairo Egypt <i>Software Developer Intern</i> July 2006 to August 2006
TECHNICAL SKILLS	<ul style="list-style-type: none">• Procedural and Object-Oriented programming: C, C++, Java, Common Lisp• System programming: SystemC, MIPS assembly• Scripting: Python, Bash• Operating systems: GNU/Linux Ubuntu, Archlinux - Microsoft Windows XP• Desktop and mobile applications development: Qt, GTK+, PyGTK, J2ME• Agent-based development: JADE (Java Agent DEvelopment Environment)• Development libraries: GCC, G++, GDB, QMake, Cmake, libcap• Compiler development: Flex, Bison• Graphics and computer vision: OpenGL, OpenCV, cairo

- **Version control and documentation:** Git, Subversion, Doxygen
- **IDEs and editors:** Qt Creator, Qt Designer, Anjuta, Eclipse, JCreator, vim, Gedit
- **Web development:** HTML, XML, PHP, JSP, MySQL, Apache Tomcat
- **Productivity tools:** OpenOffice, Abiword, L^AT_EX, Microsoft Office 2003

CURRICULAR
PROJECTS

- E-learning database using Microsoft SQL Server, Java
- Web-based movies application in XML, DOM, JSP and Apache Tomcat
- Board game Triominos in Java
- 4-bit ALU in Verilog HDL
- Two-pass MIPS assembler in Java
- Mini chatting application in Java
- Audio player with 3D visualizations in C++, OpenGL and FMOD sound library
- Tetris game in C and OpenGL
- 32-bit processor in SUE
- Embedded parking sensor system in mikro-C on PIC and breadboard
- Java-based elevator system simulator to test machine learning techniques
- Simulator for sensor networks deployment algorithms in Java
- Image manipulation programs in C, C++, openCV and GTK+
- Mobile information provider using J2ME and Bluegiga Bluetooth server
- Mini Eliza-like therapist chatterbot in Common Lisp
- Wumpus World agent in Common Lisp
- Handwritten interpreter for an educational programming language called X in C
- 32-bit encryption processor in SystemC
- TCP hijacker in C, libpcap and GTK+
- Multi-layer perceptron neural network trained in back-propagation written in Python

OPEN SOURCE
REPOSITORIES

- Generic **googlecode** repository, <http://code.google.com/p/mikeymorckos/>
- Author, developer and maintainer of **KTriominos** <http://gitorious.org/search?q=ktriominos>
- Developer of **Grafeo**, <http://code.google.com/p/grafeo/>

ACADEMIC
EXPERIENCE

Junior Teaching Assistant. Computer Science Department, GUC. (September 2007 - June 2008)
Teaching Assistant. Computer Science Department, GUC. (February 2010 - May 2010)

RESEARCH

Michael Morckos and Alaa M. Khamis. "MULTI-AGENT SIMULATOR FOR REINFORCEMENT LEARNING-BASED ELEVATOR DISPATCHING", PAMI Newsletter January 2009 issue, University of Waterloo, Canada.

LANGUAGES

English and Arabic: Fluent
 German: Basic

OTHER ACTIVITIES **Wikipedia** contributor, Reading, Submarines, Languages, Algorithms, Swimming

PERSONAL
INFORMATION

Date of birth: 1987

REFERENCES

Available upon request