ERIC L. M. THOMAS

Education

Spring 2009	Bachelor of Science: Computer Science Rowan University, Glassboro, NJ Specializations: Software Engineering, Information Technology, Programming Languages & Compilers, Artificial Intelligence GPA: 3.551, Cum Laude

Technical Skills

Languages:	C/C++, Ruby, Tcl/Tk, Java, Python, Perl, PHP, Scheme, bash, tcsh
Systems:	Linux (Fedora, Ubuntu, RHEL), Unix (AIX, Solaris), Microsoft Windows (3.1 - Vista)
Software:	Version control(Git/Mercurial/SVN), Development tools(vim, Eclipse), Database systems(MySQL, SQLite), Web servers(Apache, mongrel), many Unix utilities.
Miscellaneous:	Rails, XML, YAML, HTML5, REST, regular expressions

Projects

drum-tabber Spring 2009
A multi-threaded Java application that decrypts MIDI signals from an electronic drum kit and converts them to drum tablature (music notation represented with ASCII text).

arimaai Spring 2009
Co-developed an AI bot in Python and Psyco to explore various search algorithms implemented for Arimaa, a board game that has proven to be more difficult for computers than chess.

WebGPS Fall 2008
Real-time interactive web visualization tool which graphically displays the hierarchy structure of a web page.

FlightGUI Spring 2008
Served as team leader on a collaborative project between Rowan University and Fairfield University to develop FlightGUI, an application that calculates and graphically displays readings of flights in conflict.

AWARDS

- Upsilon Pi Epsilon International Computer Science Honor Society
- Chi Alpha Sigma National Athletic Honor Society
- Edward J. Bloustein Scholarship

Professional Experience

Computer Scientist — Spring 2009 to Present
Federal Aviation Administration, Pomona, NJ

Currently working with a rapid prototyping team that coordinates with human factors experts to prototype new air traffic control systems.

- Redeveloped DataLink, a simulated "text messaging" system between controller and pilot to replace voice-only communications.
- Wrote various data capturing plugins to calculate air traffic within a given region of airspace.
- Converted system from 32 bit to 64 bit architecture.
- Created custom supervisor and test suite GUIs.
- Configured system to utilize the Boost C++ libraries.

Researcher — Winter 2008 to Spring 2009
Rowan University, Glassboro, NJ

Co-developed a unique concept of data analysis to compare aircraft trajectory prediction tools.
Paper: *Enhanced Star Glyphs for Multiple-Source Data Analysis*; presented at 13th International Conference on Information Visualization (IV), 2009.

Student Co-op — Spring 2008 to Summer 2008
Federal Aviation Administration, Pomona, NJ

- Developed application to read and parse a live data stream of the position and flight plans of all aircraft in the National Airspace System.
- Wrote an inventory management system in PHP/MySQL.
- Performed network configuration of a research and testing laboratory.
- Installed and managed an Apache HTTP server.

Community Service

- Served as a teacher of web design and development for a non-profit organization that provides creative programs to the youth in Camden City. The program was featured on NBC's 10! show.
- One of three judges for the math category at the Jersey Shore Science Fair.

Hobbies

Competitive runner, board game aficionado, parsing expression grammar dabbler.

Contact

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