

SUMMARY

Experienced software developer in mobile messaging services and web-based applications. Proficient in industry-leading programming languages and their application in large-scale systems. Holds a Master of Science degree in computer science from McGill University.

TECHNICAL SKILLS

Programming/Scripting	Java, Scala, C, Ruby, JavaScript, Perl, Python, Bash, SQL, Expect
Web Technologies	HTML5, CSS3, Ruby on Rails, AWS, Apache HTTP Server, Microsoft SharePoint Server
Database Technologies	MongoDB, Cassandra, Redis, Oracle, PostgreSQL, MySQL
Protocols	HTTP, SOAP, SMPP, RADIUS
Cluster Technologies	openMosix, MPICH
Platforms	Linux, BSD, Microsoft Windows/Advanced Server
Statistical Software	Matlab, NumPy/SciPy, R

WORK EXPERIENCE

Software Developer , Startup company, Montreal	2011 Jul - Present
Software Developer , Nokia Products Limited (acquired Oz Communications in 2008), Montreal	2008 Jul - 2011 Jul
<ul style="list-style-type: none">· Involved in the development life-cycle for customer authentication, authorization, and billing within the IM product; e.g., Sprint, T-Mobile US, and T-Mobile International· Developed a management and installation tool for the IM/email product within a cluster environment· Mentored new employees working on customer authentication, authorization, and billing· Contributed to the specification/scope of new customer projects for the IM product	
Research Assistant , McGill University, Computer Science Department, Montreal	2006 Aug - 2008 Jun
<ul style="list-style-type: none">· Implemented similarity measures for rhythms· Investigated methods for measuring rhythmic syncopation· Conducted algorithmic analysis of Indian Talas and Afro-Cuban rhythms	
Data Analyst , McGill University, Psychology and Music Technology Department, Montreal	2007 Feb - 2008 Jun
<ul style="list-style-type: none">· Performed statistical analysis of time-series data· Conducted exploratory qualitative and quantitative data testing· Studied human emotional response vs. musical structure	
Web Applications Developer , The College of New Jersey, Ewing, New Jersey	2004 Jan - 2006 Jul
<ul style="list-style-type: none">· Developed campus-wide web applications for dynamic form generation and data analysis, news and event content syndication, and academic grant processing· Established back-end libraries for future applications· Interacted frequently with faculty and staff regarding project design and testing	
Library Systems Developer , The College of New Jersey, Ewing	2005 Sep - 2006 Jan
<ul style="list-style-type: none">· Developed web services for the campus community· Integrated library operations into course management software· Created a syndication system to update faculty and staff regarding new library resources	
Student Researcher , The College of New Jersey, Computer Science Department, Ewing	2004 Sep - 2005 Dec
<ul style="list-style-type: none">· Investigated media streaming for mobile devices· Developed portable software for a music play-list rating system· Ran experiments with human subjects for music play-list organization	
Intranet Web Developer , Markel Underwriting Managers, Red Bank, New Jersey	2002 Jun - 2004 Jan
<ul style="list-style-type: none">· Integrated commercial web-portal software with local infrastructure· Improved web-based software to meet company needs· Created an online scheduling system for conferences and appointments	

EDUCATION

Master of Science in Computer Science, *Dean's honour list*
McGill University, Montreal, Quebec, Canada

2006 Aug - 2008 Jun

- Thesis: Measuring the complexity of musical rhythm
- Course work: Pattern Recognition, Machine Learning, Statistical Computer Vision, Graph Algorithms, Theoretical Programming Languages

Bachelor of Science in Computer Science, *summa cum laude*
The College of New Jersey, Ewing, New Jersey, United States

2002 Aug - 2006 May

PUBLICATIONS AND PRESENTATIONS

E Thul and G Toussaint. 2008. "Rhythm complexity measures: A comparison of mathematical models of human perception and performance". In Proceedings of the 9th International Conference on Music Information Retrieval. Philadelphia, Pennsylvania.

E Thul and G Toussaint. 2008. "On the relation between rhythm complexity measures and human rhythmic performance". In Proceedings of C3S2E '08: Canadian Conference on Computer Science & Software Engineering. Montreal, Quebec, Canada.

E Thul and G Toussaint. 2008. "A comparative phylogenetic analysis of African timelines and North Indian talas". In Proceedings of BRIDGES: Mathematical Connections in Art, Music, and Science. Leeuwarden, The Netherlands.

F Gómez, **E Thul**, and G Toussaint. 2007. "An experimental comparison of formal measures of rhythmic syncopation". In Proceedings of the 33rd International Computer Music Conference. Copenhagen, Denmark.

E Thul. 2006. "The implementation of an adhoc environment for sharing a fixed resource with rMusic". Poster presented at the ACM Special Interest Group Computer Science Education (SIGCSE) Technical Symposium. Houston, Texas.

E Corrado, H Moulaison, and **E Thul**. 2006. "Integrating RSS feeds of new library acquisitions into a course management system". Breakout session presentation at the VALE Users'/NJ ACRL/NJLA CUS Conference "All Together Now: Taking the Lead in Collaboration and Innovation". Rutgers University, Piscataway, New Jersey.

AWARDS AND DISTINCTIONS

Key Contributor Award for 3 rd quarter performance at Oz Communications	2008
NJLA Technology Innovation Award for most innovative project at a conference	2006
Goldberg Award for top undergraduate in computer science pursuing a graduate degree	2006
Computer Science Department Award for top student in class	2005
Computer Science Department Award for top student in class	2004
Computer Science Award for top student in class	2002

Upsilon Pi Epsilon Scholarship	2005
The College of New Jersey Merit Scholarship	2002

Phi Kappa Phi Honor Society	2006
Upsilon Pi Epsilon Honor Society	2005
Golden Key Honor Society	2004

ACTIVITIES AND INTERESTS

Photography. Rediscovering the world through the lens of a digital SLR

Music Composition. Explorer of digital signal processing and computer music stochastic composition

Cycling. Enthusiast actively exploring Montreal and the surrounding area

Stained Glass. Hobbyist of stained glass lamps and decorative ornaments