

Curriculum Vitae

Eric McGregor

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I. Professional Background

A. Education

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|---------------|----------------------------------|--|
| December 2011 | <i>Ph.D., Computer Science</i> | Clarkson University, Potsdam, New York Dissertation: Automated Theorem Proving Using SAT Advisor: Christopher Lynch, PhD |
| June 2004 | <i>M.S., Mathematics</i> | State University of New York, Potsdam, New York |
| August 2000 | <i>M.S., Computer Science</i> | Wichita State University, Wichita, Kansas Project: LIVID – The First Linux Software DVD player |
| December 1992 | <i>B.S., Business Management</i> | Excelsior College, Albany, New York |

B. Employment

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|----------------------|---|
| 2013-present | <i>Assistant Professor of Computer Science, Bridgewater College</i> |
| 2011-2013 | <i>Intelligence Community Fellow, Clarkson University</i> |
| 2012-2013, 2009-2010 | <i>Instructor, Department of Mathematics & Computer Science, Clarkson University</i> |
| 2006-2011 | <i>Teaching Assistant, Clarkson University</i> |
| 2002-2005 | <i>Independent Contractor</i> |
| 2001 | <i>Software Engineer, CR Software Inc., Fairfax, Virginia</i> |
| 2000 | <i>Instructor, Department of Mathematics & Computer Science, Wichita State University</i> |
| 1996-1999 | <i>Systems Support Analyst, Marriott International, Wichita, Kansas</i> |

C. Honors and Awards

Clarkson University

| | |
|------|---|
| 2012 | <i>RESPECT Award, Office of Accommodative Services</i> |
| 2012 | <i>Commendation for Outstanding Teaching, Dean of Students</i> |
| 2010 | <i>Commendation for Outstanding Teaching, Dean of Students</i> |
| 2009 | <i>Sanda Briggs Award, Outstanding Teaching Assistant, Department of Mathematics & Computer Science</i> |
| 2007 | <i>Distinguished Alumni Award, Beta Chi Chapter of Phi Kappa Sigma</i> |
| 2007 | <i>Sanda Briggs Award, Outstanding Teaching Assistant, Department of Mathematics & Computer Science</i> |

II. Instruction

| Course # | Title | Year(s) | # of Students |
|--|---|-------------|---------------|
| <u>Bridgewater College, Department of Mathematics and Computer Science</u> | | | |
| CSCI-105 | <i>Introduction to Programming</i> | '16 | 26 |
| CSCI-200 | <i>Intermediate Programming</i> | '16 | 6 |
| CSCI-205 | <i>Data Structures</i> | '14,'15,'16 | 11,23,19 |
| CSCI-225 | <i>Mathematical Structures</i> | '14,'15,'16 | 11,16,29 |
| CSCI-230 | <i>Scripting Languages</i> | '14,'16 | 25,1 |
| CSCI-240 | <i>Web API Programming</i> | '14,'16 | 16,24 |
| CSCI-300 | <i>Mobile Application Development</i> | '13,'15,'15 | 19,12,7 |
| CSCI-305 | <i>Animation and 3D Programming</i> | '16 | 5 |
| CSCI-320 | <i>Algorithm Analysis</i> | '13,'15,'16 | 18,18,3 |
| CSCI-330 | <i>Operating Systems</i> | '14,'15,'15 | 2,14,3 |
| CSCI-340 | <i>Computer Architecture</i> | '16,'16 | 1,28 |
| CSCI-410 | <i>Signal and Image Processing</i> | '14 | 6 |
| CSCI-415 | <i>Artificial Intelligence</i> | '16 | 15 |
| MATH-107 | <i>Quantitative Reasoning</i> | '14 | 35 |
| MATH-118 | <i>Quantitative Reasoning</i> | '15 | 14 |
| CIS-325 | <i>Data Communications</i> | '16 | 15 |
| CIS-350 | <i>Database Management</i> | '13,'14 | 22,12 |
| CIS-450 | <i>Software Engineering</i> | '14 | 19 |
| <u>Clarkson University, Department of Mathematics and Computer Science</u> | | | |
| MA211 | <i>Foundations (Discrete Mathematics)</i> | '13,'12 | 48, 30 |
| MA231 | <i>Calculus III</i> | '12 | 101 |
| CS 141 | <i>Introduction to Computer Science</i> | '10,'09 | 50,62 |
| MA180 | <i>Introductory College Mathematics</i> | '09 | 33 |
| <u>Wichita State University, Department of Computer Science</u> | | | |
| CS440 | <i>Computer Hardware Design</i> | '00 | 30 |

III. Languages, Libraries and Tools

- Java 8 (including Generics and JUnit), C++, Python, Matlab, I86-64 Assembly
- HTML5, CSS3, ECMAScript 2016, Babylon.js, bootstrap.js, Atom IDE, GoDaddy control panel
- MySQL, MySQL Workbench
- Eclipse, Git, GitHub, Android SDK, Android Studio
- Visio, GIMP, LaTeX
- Linux, MacOS, UNIX programming

IV. Research

- Thoracic biometric using electrocardiogram and thoracic pulse
- First-order logic, automated reasoning, theorem proving
- 3D information visualization

A. Undergraduate Student Research

1. A 3D Computer Simulation, Trevor Bostic, Fall 2016
2. YAGL - A Javascript 3D Graph Library, John Moran, Summer 2016
3. A Novel Beat Detection Algorithm, Dylan Tokotch, Fall 2015
4. Thoracic Biometrics Data Collection and Software Enhancement, Troy Soaper, Summer 2015
5. Carotid Pulse Detection and Signal Enhancement in a Biometric Identification System, Tayseer O'Brien, Fall 2014

B. Published Works

1. Stephanie Schuckers, Eric McGregor: Considerations in Standoff Biometrics, In-Q-Tel Quarterly, Spring 2012
2. Christopher Lynch, Ralph Eric McGregor: Combining Instance Generation and Resolution. FroCos 2009: 304-318
3. Jeremy Bongio, Cyrus Katrak, Hai Lin, Christopher Lynch, Ralph Eric McGregor: Encoding First Order Proofs in SMT. Electr. Notes Theor. Comput. Sci. 198(2): 71-84 (2008)
4. Todd Deshane, Wenjin Hu, Patty Jablonski, Hai Lin, Christopher Lynch, Ralph Eric McGregor: Encoding First Order Proofs in SAT. CADE 2007: 476-491

C. Unpublished Works

1. Thoracic Biometrics - Investigations of the Human Heartbeat as a Biometric: Heart Sounds, Electrocardiogram, and Vibrometry, IC Postdoctoral Fellowship Report Update, January 2015
2. Thoracic Biometrics - Investigations of the Human Heartbeat as a Biometric: Heart Sounds, Electrocardiogram, and Vibrometry, IC Postdoctoral Fellowship Final Report, May 2013

D. Presentations

1. Eric McGregor: Thoracic Biometrics—Investigations of the Human Heartbeat as a Biometric: Heart Sounds, Electrocardiogram, and Vibrometry. 2012 IC Colloquium
2. Stephanie Schuckers, Eric McGregor: Thoracic Biometrics – Investigations of the Human Heartbeat as a Biometric: Heart Sounds, Electrocardiogram, and Vibrometry, InQTel Corporation, 2011
3. Todd Deshane, Wenjin Hu, Patty Jablonski, Hai Lin, Christopher Lynch, Ralph Eric McGregor: Encoding First Order Proofs in SAT. CADE 2007

V. Service and Memberships

A. Professional

| | |
|----------------|---|
| 2016 - present | Special Interest Group on Computer Science Education (SIGCSE) |
| 2016 - present | Member, Department of Communications Hiring Committee |
| 2015 - present | First Year Faculty Committee, Bridgewater College |
| 2013 - present | Advisor, Bridgewater College Computing Club |
| 2013 - present | The Association for Computing Machinery (ACM) |
| 2007 - present | The Association for Automated Reasoning (AAR) |
| 1999 - present | Pi Mu Epsilon Mathematics Society, Wichita State University |

B. Community and Social Organizations

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|----------------|------------------------------|
| 2016 - present | The Federalist Society |
| 2013 - present | Bridgewater Community Garden |

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| 2014 - present | Active participant, Bethany Methodist Church |
| 2014 - present | Member, Town of Mount Crawford Economic Development Committee |
| 1989 - present | Phi Kappa Sigma Fraternity, SUNY Potsdam |

C. Past Service

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|-------------|---|
| 2015 - 2016 | Volunteer, Bethany Methodist Church Food Pantry |
| 2015 - 2015 | Member, Department of Business and Economics Hiring Committee |
| 2011 - 2013 | Member, Town of Stockholm Economic Development Committee |