

Edward L. Platt

Curriculum Vitae

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Education

PhD candidate

University of Michigan, School of Information, 2015--present

Advisor: D.M. Romero

M.Math., Applied Mathematics

University of Waterloo, 2007--2009.

Thesis: "WKB Analysis of Tunnel Coupling in a Simple Model of a Double Quantum Dot."

Advisors: J. Paldus, F. Wilhelm-Mauch

S.B., Computer Science

S.B., Physics

Massachusetts Institute of Technology, 2002--2006.

Thesis: "Effects of Control Error on an Adiabatic Quantum Algorithm."

Advisor: E. Farhi.

Peer-Reviewed Publications

- E. L. Platt, D. M. Romero. "Towards Attack-Tolerant Networks: Concurrent Multipath Routing and the Butterfly Network." *PloS one*. 2019.
- E. L. Platt, D. M. Romero. "Network Structure, Efficiency, and Performance in WikiProjects." *Twelfth International AAAI Conference on Web and Social Media*. 2018
- E. L. Platt, R. Bhargava, E. Zuckerman. "The International Affiliation Network of YouTube Trends." *Ninth International AAAI Conference on Web and Social Media*. 2015.

Books

- E. L. Platt. *Network Science with Python and NetworkX Quick Start Guide*. 2019. Packt.

Refereed Workshops and Abstracts

- E. L. Platt, D. M. Romero. "Local Majority: A Limited-Concern Strategy for Networked Social Learning." *NetSci*. 2019.
- E. L. Platt, D. M. Romero. "Network Structure, Efficiency, and Performance in WikiProjects." *Michigan Institute for Data Science Annual Symposium*. 2018
- E. L. Platt, D. M. Romero. "Network Structure, Efficiency, and Performance in WikiProjects." *International Conference on Computational Social Science*. 2018
- E. L. Platt, D. M. Romero. "Towards Attack-Tolerant Networks: Multipath Fault Tolerance" *NetSci*. 2017.

- E. L. Platt, D. M. Romero. “Synthetic Webs of Trust for Egalitarian Communities.” *Second International Conference on Computational Social Science*. 2016

Posters

- E. L. Platt, D. M. Romero. “Network Structure, Efficiency, and Performance in WikiProjects.” *NetSci*. 2019.
- E. L. Platt, D. M. Romero. “Scalable Egalitarian Networks and the Nested Clique.” *NetSci*. 2017.
- E. L. Platt, D. M. Romero. “Attack-tolerant network architectures.” *Michigan Institute for Data Science Annual Symposium*. 2016.
- E. L. Platt, D. M. Romero. “Attack-tolerant network architectures.” *IPAM Cultural Analytics Workshop III: Cultural Patterns: Multiscale Data-driven Models*. 2016.

Research

Research Assistant, E. Bruch and D.M. Romero, University of Michigan, 2017--present.
Developing lab material for courses in computational social science. Creating labs to demonstrate common tools and reproduce important studies on online experiments, network analysis, natural language processing, and online communities.

Research Assistant, D.M. Romero, University of Michigan School of Information, 2015--2017.
Analyzed large-scale decision-making in online communities. Used simulation and empirical analysis to determine influence of network structure on efficacy of collaboration on Wikipedia.

Staff, MIT Center for Civic Media, 2012--2015.

Provided software engineering support to graduate students on numerous projects. Used network analysis and multiple regression to determine factors contributing to media attention across national borders.

Master's Thesis, Waterloo, 2007--2009.

Modeled double quantum dots and used numerical simulations to determine the effects of bias on tunneling. Advisors: J. Paldus, F. Wilhelm-Mauch.

Undergraduate Thesis, MIT, 2005--2006.

Modeled and characterized effects of control error on an adiabatic quantum algorithm. Advisor: E. Farhi.

Undergraduate Researcher, MIT/CERN Compact Muon Solenoid, 2005.

Took over and completed implementation of CMSRoot, a high-energy physics simulation framework. Simulated heavy ion collisions in the LHC. Advisor: B. Wyslouch.

Undergraduate Researcher, MIT Media Lab: Quanta, 2004.
Implemented matrix factorizations and simulated fault-tolerant quantum computations. Advisor: I. Chuang.

Undergraduate Researcher, MIT Media Lab: Tangible Media, 2003.
Contributed to development of CircuitUI, a tangible user interface for circuit design. Created teaching materials for MIT 8.02T Electricity and Magnetism. Advisor: H. Ishii.

Undergraduate Researcher, MIT Cognition Lab, 2002--2003.
Implemented visual imagery experiments and administered to human subjects. Advisor: L. Boroditsky.

Teaching

- Fall 2019, U. Michigan. GSI for SI 664, Database Application Design.
- Summer 2008, Waterloo. TA for AMATH 250, Introduction to Differential Equations.
- Spring 2008, Waterloo. TA for AMATH 250, Introduction to Differential Equations.
- Fall 2007, Waterloo. TA for MATH 125, Applied Linear Algebra I.
- Fall 2007, Waterloo. TA for MATH 127, Calculus I for the Sciences.
- Fall 2004, MIT. Lab asst. for MIT 1.00, Computers and Engineering Problem Solving.
- Spring 2003, MIT. Lab asst. for MIT 1.00, Computers and Engineering Problem Solving.

Awards and Fellowships

- Data Science for Social Good Fellowship, 2018 (declined).
- Best Software, APSA - ITP, 2014 (PageOneX, collaboration).
- Hack of Honor, Penguicon 2010 (i3 Detroit, collaboration).
- Design Award, MIT 6.170 Software Engineering, 2005 (collaboration).
- Ronald H. Cordover Scholar in the Arts, 2003--2006.

Invited Lectures

- March 2014, MIT MAS.571 Social TV. "What We Watch."
- February 2014, MIT CMS.400 Media Systems and Texts. "Content Analysis."

Talks

- April 2019. Penguicon. "Network Science with NetworkX."
- March 2019. LibrePlanet. "Free Software for Large-Scale Collaboration."
- March 2019. U. Mich. Center for the Study of Complex Systems. "Large Scale Collaboration and Deliberation on Networks."
- November 2017. U. Mich. School of Info., "Simulating Wikipedia: Modeling peer production as networked social learning."
- May 2017. Harvard Berkman-Klein Center, Cooperation Working Group. "Performance and Efficiency in WikiProjects."
- April 2017. Penguicon. "The Future of Net Neutrality."
- April 2017. Penguicon. "Re-Decentralizing the Web."

- July 2016. HOPE. "Censorship- and Coercion-Resistant Network Architectures."
- April 2016. Penguicon. "How Will Technology Change Society."
- April 2016. Penguicon. "Free and Open Source Democracy."
- February 2016. U. Mich. School of Info., "Synthetic Webs of Trust for Egalitarian Communities."
- April 2015. Penguicon, "Social Network Analysis with NetworkX and Gephi."
- April 2015. Penguicon, "Leading FLOSS Projects."
- April 2014. Penguicon. "Civic Technology."
- February 2014, Harvard Berkman Center, Cooperation Working Group. "What We Watch."
- June 2013, Allied Media Conference. "Vojo."
- April 2013, Penguicon. "VoIP, SMS, and MMS."
- April 2013, Penguicon. "Seltzer CRM."
- April 2012, Penguicon. "Drupal CCK: Easily manage complex data without any programming."
- April 2010, Penguicon. "Hackerspaces."
- February 2010, Ignite Detroit. "Something About Dopamine."

Program Committees and Professional Service

- Invited Reviewer, PLOS ONE.
- Technical Reviewer, "Mastering Quantum Computing with IBM QX," Packt publishing.
- Invited Reviewer, CHI 2018.
- Program Committee, 12th International AAAI Conference on Web and Social Media.
- Program Committee, 11th International AAAI Conference on Web and Social Media.
- Program Committee, 10th International AAAI Conference on Web and Social Media.

Other Service

- GEO Bargaining Committee, co-chair, 2019--present
- GEO Platform Development Committee, 2018-2019
- Ypsi Arbor SOUP, board member, 2017--present
- MIT Admissions, Engineering Advisory Board, 2014--present
- MIT Admissions, Educational Counselor, 2011--2012
- i3 Detroit: co-founder, treasurer, and board member, 2009--2014
- List Visual Arts Center: board member, 2004--2006

Work Experience

Freelance Web Developer, Chatango, 2011--2012.

Created embeddable JavaScript group chat. Responsible for cross-browser/mobile compatibility.

Freelance Web Developer, Doner Advertising, 2010--2011.

Implemented websites/CMS for clients including Quaker State, Dupont Teflon, and Pictsweet.

Freelance Web Developer, 2009--2010.

Developed websites for clients including Modernistic Carpet, Shrader Labs, H.A. King.

Software Engineer, Zimride (Lyft), 2008--2009.

Collaborated with company founders to implement social feedback and rating system.

Software Engineer, Apple Computer, Color Imaging Group, 2006.

Applied machine learning and image processing to content-based image retrieval.