Biographical Sketch

John M. Edwards, Assistant Professor
Utah State University
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Professional Preparation

Institution	Location	Major	Degree, Year
Utah State University	Logan, Utah	Computer Science	B.S., 1998
Brigham Young University	Provo, Utah	Computer Science	M.S., 2004
The University of Texas	Austin, Texas	Computer Science	Ph.D., 2013
The University of Utah	Salt Lake City, Utah	Visualization	Postdoc, 2013-2015

Appointments

Period	Appointment	Institution & location
2018-Present	Assistant Professor	Utah State University, Logan, UT
2015-2018	Assistant Professor	Idaho State University, Pocatello, ID
2012	Visiting Scholar	University of Hong Kong, Hong Kong, China
2008-2009	Visualization Research Engineer	Autonomous Solutions, Inc., Logan, UT
2005-2008	Software Engineer	ProLogic, Inc., Fairmont, WV
1999-2005	Software Engineer	Rigaku, Inc., Houston, TX

Products

Selected Products

1. John Edwards, Erika Fulton, Jonathan Holmes, Joseph Valentin, David Beard, and Kevin Parker. Separation of syntax and problem solving in Introductory Computer Programming. IEEE Frontiers in Education. San Jose, CA. October 2018.
2. Boyd Edwards and John Edwards. Dynamical interactions between two uniformly magnetized spheres. European Journal of Physics, 38(1):015205, 2016.
3. Xin Tong, John Edwards, Chun-Ming Chen, Han-Wei Shen, Christopher Johnson, and Pak Chung Wong. View-dependent streamline deformation and exploration. *IEEE Transactions on Visualization and Computer Graphics*. 22(7):1788-1801. 2016.
4. *Phanon* - Computer programming educational software.
   `http://phanon.herokuapp.com`
5. *MagPhyx* - Magnet simulation software
   `http://edwardsjohnmartin.github.io/MagPhyx`

Additional Products

1. DeWayne Derryberry, Ken Aho, John Edwards, and Teri Peterson. Model selection and regression t-statistics. *The American Statistician*. In press. 2018.
2. Boyd Edwards and John Edwards. Periodic nonlinear sliding modes for two uniformly magnetized spheres. Chaos: An Interdisciplinary Journal of Nonlinear Science, 27(5):053107, 2017.
3. Nathan Morrical and John Edwards. Parallel quadtree construction on collections of objects. *Computers and Graphics*. 66:162168. 2017.
4. John Edwards, Eric Daniel, Valerio Pascucci, Chandrajit Bajaj. Approximating the Generalized Voronoi Diagram of Closely Spaced Objects. *Computer Graphics Forum*. 34(2):299-309. 2015.
5. John Edwards, Eric Daniel, Justin Kinney, Terrence Sejnowski, Tom Bartol, Daniel Johnston, Kristen Harris, and Chandrajit Bajaj. VolRoverN: Enhancing surface and volumetric reconstruction for realistic dynamical simulation of cellular and subcellular function. *Neuroinformatics*. 12(2):277-289. 2014.

Synergistic Activities

1. **Program committee:** International Conference on Geometric Modeling and Processing (GMP) 2015, 2016, 2017, 2018. **Reviewer:** *ACM SIGCSE 2019*, *IEEE Frontiers in Education 2018*, GMP 2015, 2016, 2017, Computing Surveys, Computer Aided Geometric Design, European Symposium on Algorithms 2014, International Meshing Roundtable, SIGGRAPH Asia 2015. **Session chair:** Idaho Academy of Science and Engineering Annual Meeting, 2016.
2. **Outreach:** Acted as faculty advisor to student-led Google igniteCS high school outreach workshop series to Blackfoot High School, Spring 2017. Faculty advisor to Google igniteCS/Idaho STEM Action Center middle school outreach workshop series to eight local middle schools, Fall 2017.
3. **Teaching:** Development and delivery of undergraduate and graduate courses on data visualization, data science, advanced algorithms, graphics, compilers, operating systems. 2013-2019. Teaching Innovation Grant for Introductory Computer Programming course, 2017.
4. **Advising:** Joseph Ditton (Master's) - CS1 education. Selected undergraduate student projects: Nathan Morrical (now at UofU) - Parallel GVD; Marko Sterbentz (now at USC) and Galen Cochrane - Lidar data collection and analysis; Jonathan Glines (now at NVIDIA) - Bird flocking analysis.
5. **Applicable workshop:** NSF Developing Empirical Education Research Studies (DEERS). Charlottesville, VA. 3rd cohort. July 17-19, 2018.