

Publications

John Edwards

January 16, 2023

References

- [1] Steven Scott, Arto Hellas, Juho Leinonen, and John Edwards. Factors Affecting Compilable State at Each Keystroke in CS1. In *ACM International Conference on Software Engineering (ICSE), Software Engineering Education and Training (SEET) track*, 2023.
- [2] John Edwards, Kaden Hart, and Raj Shrestha. Review of CSEDM Data and Introduction of Two Public CS1 Keystroke Datasets. *Journal of Educational Data Mining*, 2023.
- [3] Kaden Hart, Chad Mano, and John Edwards. Plagiarism Deterrence in CS1 Through Keystroke Data. In *ACM Technical Symposium on Computing Science Education (SIGCSE)*, 2023.
- [4] Kaden Hart, Christopher Warren, and John Edwards. Accurate Estimation of Time-on-Task While Programming. In *ACM Technical Symposium on Computing Science Education (SIGCSE)*, 2023.
- [5] Boyd F Edwards, Cade Pankey, and John M Edwards. Inertial motion on the earth’s spheroidal surface. *Chaos: An Interdisciplinary Journal of Nonlinear Science*, 2022.
- [6] John Edwards, Kaden Hart, and Christopher Warren. A Practical Model of Student Engagement While Programming. In *ACM Technical Symposium on Computing Science Education (SIGCSE)*, 2022.
- [7] Delaney Moore, John Edwards, Hamid Karimi, Rajiv Khadka, and Paul Bodily. Temporal Abstract Syntax Trees for Understanding Student Coding Thought Process. In *IEEE Intermountain Engineering, Technology, and Computing Conference (i-ETC)*. IEEE, 2022.
- [8] Marina Johnson, Hillary Swanson, and John Edwards. Syntax Exercises and Their Effect on Computational Thinking. In *IEEE Intermountain Engineering, Technology, and Computing Conference (i-ETC)*. IEEE, 2022.

- [9] Aashish Ghimire and John Edwards. Introspection with Data: Using Personality Traits for Academic Major Selection. In *IEEE Intermountain Engineering, Technology, and Computing Conference (i-ETC)*. IEEE, 2022.
- [10] Gordon Fjeldsted and John Edwards. Quantifying Student Struggles using Heatmaps and Keystroke Data. In *IEEE Intermountain Engineering, Technology, and Computing Conference (i-ETC)*. IEEE, 2022.
- [11] Raj Shrestha, Juho Leinonen, Albina Zavgorodniaia, Arto Hellas, and John Edwards. Pausing While Programming: Insights From Keystroke Analysis. In *ACM International Conference on Software Engineering (ICSE), Software Engineering Education and Training (SEET) track*, 2022.
- [12] Raj Shrestha, Juho Leinonen, Arto Hellas, Petri Ihantola, and John Edwards. CodeProcess Charts: Visualizing the Process of Writing Code. In *The Twenty-Fourth Australasian Computing Education Conference (ACE)*, 2022.
- [13] Eric Bagley, Jessica Shumway, and John Edwards. Second-grade Students’ Use of Visual Programming to Learn Multiplication: Leveraging the Concept of Iteration. In *The Twenty-Fourth Australasian Computing Education Conference (ACE)*, 2022.
- [14] Boyd F Edwards and John M Edwards. Geodetic Model for Teaching Motion on the Earth’s Spheroidal Surface. *European Journal of Physics*, 2021. Accepted for publication.
- [15] Anna Ly, John Edwards, Michael Liut, and Andrew Petersen. Revisiting Syntax Exercises in CS1. In *ACM Conference on Information Technology Education (SIGITE)*, 2021.
- [16] John Edwards, Cameron Krome, and Tracy Payne. Computation of Positively Graded Filiform Nilpotent Lie Algebras in Low Dimensions. *Symbolic Computation*, 2021. Accepted for publication.
- [17] Bishal Sainju, Christopher Hartwell, and John Edwards. Job satisfaction and employee turnover determinants in Fortune 50 companies: Insights from employee reviews from Indeed.com. *Decision Support Systems*, 2021. Accepted for publication.
- [18] Albina Zavgorodniaia, Raj Shrestha, Juho Leinonen, Arto Hellas, and John Edwards. Morning or Evening? An Examination of Circadian Rhythms of CS1 Students. In *ACM International Conference on Software Engineering (ICSE), Joint Track on Software Engineering Education and Training (JSEET)*, 2021.
- [19] Shelsey Sullivan, Hillary Swanson, and John Edwards. Student attitudes toward syntax exercises in CS1. In *ACM Technical Symposium on Computing Science Education*, 2021.

- [20] Joseph Ditton, Hillary Swanson, and John Edwards. External imagery in computer programming. In *ACM Technical Symposium on Computing Science Education*, 2021.
- [21] John Edwards, Juho Leinonen, Albina Zavgorodniaia, Chetan Birthare, and Arto Hellas. Programming versus natural language: on the effect of context on typing in CS1. In *ACM International Computing Education Research (ICER) Conference*, 2020.
- [22] John Edwards, Joseph Ditton, Dragan Trninic, Shelsey Sullivan, Hillary Swanson, and Chad Mano. Syntax exercises in CS1. In *ACM International Computing Education Research (ICER) Conference*, 2020.
- [23] Steven Scott, Jaxon Willard, and John Edwards. High Dimensional Event Exploration over Multiple Simulations. In *IEEE Intermountain Engineering, Technology, and Computing Conference (i-ETC)*. IEEE, 2020.
- [24] John Edwards, Joseph Ditton, Bishal Sainju, and Joshua Dawson. Different Assignments as Different Contexts: Predictors Across Assignments and Outcome Measures in CS1. In *IEEE Intermountain Engineering, Technology, and Computing Conference (i-ETC)*. IEEE, 2020.
- [25] Christopher Hartwell, Tyler Orr, and John Edwards. The Effect of Online Application Efficiency on Applicant Attrition. *International Journal of Selection and Assessment*, 2020.
- [26] John Edwards, Juho Leinonen, and Arto Hellas. A Study of Keystroke Data in Two Contexts: Written Language and Programming Language Influence Predictability of Learning Outcomes. In *ACM Technical Symposium on Computing Science Education*. ACM, 2020.
- [27] John Edwards, Erika Fulton, Jonathan Holmes, Joseph Valentin, David Beard, and Kevin Parker. Separation of syntax and problem solving in Introductory Computer Programming. In *IEEE International Conference on Frontiers in Education*. IEEE, 2018.
- [28] Lloyd Griffel, Donna Delparte, and John Edwards. A machine learning approach using spectral signatures to detect potato plants infected with Potato Virus Y. *Precision Agriculture*, 2018.
- [29] DeWayne Derryberry, Ken Aho, John Edwards, and Teri Peterson. Model selection and regression t-statistics. *The American Statistician*, 0(0):1–3, 2018.
- [30] Sidharth Kumar, Duong Hoang, Steve Petruzza, Valerio Pascucci, and John Edwards. Reducing network congestion and synchronization overhead during data aggregation when writing hierarchical data. In *IEEE International Conference on High Performance Computing, Data, and Analytics*. IEEE, 2017.

- [31] Nathan Morrical and John Edwards. Parallel quadtree construction on collections of objects. *Computers and Graphics*, 66:162–168, 2017.
- [32] Boyd F Edwards and John M Edwards. Periodic nonlinear sliding modes for two uniformly magnetized spheres. *Chaos: An Interdisciplinary Journal of Nonlinear Science*, 27(5):053107, 2017.
- [33] Xin Tong, John Edwards, Chun-Ming Chen, Han-Wei Shen, Chris R Johnson, and Pak Chung Wong. View-dependent streamline deformation and exploration. *IEEE transactions on visualization and computer graphics*, 22(7):1788–1801, 2016.
- [34] John Edwards, Sidharth Kumar, and Valerio Pascucci. Big data from scientific simulations. In L. Grandinetti, G.R. Joubert, M. Kunze, and V. Pascucci, editors, *Big Data and High Performance Computing*, pages 32–46. IOS Press, Amsterdam, Berlin, Tokyo, Washington, DC, 2015.
- [35] John Edwards, Eric Daniel, Valerio Pascucci, and Chandrajit Bajaj. Approximating the Generalized Voronoi Diagram of closely spaced objects. *Computer Graphics Forum*, 34(2):299–309, 2015.
- [36] Sidharth Kumar, John Edwards, Peer-Timo Bremer, Aaron Knoll, Cameron Christensen, Venkatram Vishwanath, Philip Carns, John Schmidt, Valerio Pascucci, et al. Efficient I/O and storage of adaptive-resolution data. In *High Performance Computing, Networking, Storage and Analysis, SC14: International Conference for*, pages 413–423. IEEE, 2014.
- [37] John Edwards, Eric Daniel, Justin Kinney, Tom Bartol, Terrence Sejnowski, 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.
- [38] John Edwards, Wenping Wang, and Chandrajit Bajaj. Surface segmentation for improved remeshing. In *Proceedings of the 21st International Meshing Roundtable*, pages 403–418. Springer, 2013.
- [39] John Edwards and Chandrajit Bajaj. Topologically correct reconstruction of tortuous contour forests. *Computer-Aided Design*, 43(10):1296–1306, 2011.
- [40] Joel Alberts, John Edwards, Josh Johnston, and Jeff Ferrin. 3D visualization for improved manipulation and mobility in EOD and combat engineering applications. In *SPIE Defense, Security, and Sensing*, page 43. International Society for Optics and Photonics, 2009.