BRIAN L. HILL

Curriculum Vitae

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EDUCATION

University of California, Los Angeles　　　　　　　　　　　　　　　2016 - Present
Ph.D. Computer Science
Department of Computer Science
Advisor - Professor Eran Halperin

University of California, Los Angeles　　　　　　　　　　　　　　　2019
M.S. Computer Science
Department of Computer Science
Advisor - Professor Eran Halperin

Oregon State University　　　　　　　　　　　　　　　　　　　　　2016
B.S. Electrical and Computer Engineering
Department of Electrical Engineering and Computer Science
Minor in Computer Science

PUBLICATIONS

A machine learning algorithm to increase COVID-19 inpatient diagnostic capacity
David Goodman-Meza, Akos Rudas, Jeffrey N. Chiang, Paul C. Adamson, Joseph Ebinger,
Nancy Sun, Patrick Botting, Jennifer A. Fulcher, Faysal G. Saab, Rachel Brook, Eleazar Eskin,
Ulzee An, Misagh Kordi, Brandon Jew, Brunilda Balliu, Zeyuan Chen, Brian L. Hill, Elior
Rahmani, Eran Halperin, Vladimir Manuel; PLOS ONE 2020.

BATMAN: fast and accurate integration of single-cell RNA-Seq datasets via minimum-weight matching
Igor Mandric, Brian L. Hill, Malika K. Freund, Michael Thompson, Eran Halperin; iScience
2020.

Advancing clinical cohort selection with genomics analysis on a distributed platform
Jaclyn M. Smith, Melvin Lathara, Hollis Wright, Brian Hill, Nalini Ganapati, Ganapati Srinivasa, Christopher T. Denny; PLOS ONE 2020.

Benchmarking of computational error-correction methods for next-generation sequencing data
Keith Mitchell, Jaqueline J Brito, Igor Mandric, Qiaozhen Wu, Sergey Knyazev, Sei Chang, Lana
S. Martin, Aaron Karlsberg, Ekaterina Gerasimov, Russell Littman, Brian L. Hill, Nicholas C
Wu, Harry Taegyun Yang, Kevin Hsieh, Linus Chen, Eli Littman, Taylor Shabani, German
Enik, Douglas Yao, Ren Sun, Jan Schroeder, Eleazar Eskin, Alex Zelikovsky, Pavel Skums,
Mihai Pop, Serghei Mangul; Genome Biology 2020.

An automated machine learning-based model predicts postoperative mortality using readily-extractable preoperative electronic health record data
Brian L. Hill, Robert Brown, Eilon Gabel, Nadav Rakocz, Christine Lee, Maxime Cannesson,

Pierre Baldi, Loes Olde Loohuis, Ruth Johnson, Brandon Jew, Uri Maoz, Aman Mahajan, Sriram Sankararaman, Ira Hofer, Eran Halperin; British Journal of Anaesthesia 2019.

Challenges and recommendations to improve the installability and archival stability of omics computational tools
Serghei Mangul, Thiago Mosqueiro, Richard J. Abdill, Dat Duong, Keith Mitchell, Varuni Sarwal, Brian L. Hill, Jaqueline Brito, Russell Jared Littman, Benjamin Statz, Angela Ka-Mei Lam, Gargi Dayama, Laura Grieneisen, Lana S. Martin, Jonathan Flint, Eleazar Eskin, Ran Blekhman; PLOS Biology 2019.

Systematic benchmarking of omics computational tools
Serghei Mangul, Lana S Martin, Brian L. Hill, Angela Ka-Mei Lam, Margaret Distler, Alex Zelikovsky, Eleazar Eskin, Jonathan Flint; Nature Communications 2019.

Precision medicine and FPGA technology: Challenges and opportunities
Brian Hill, Jaclyn Smith, Gans Srinivasa, Kemal Sonmez, Ashish Sirasao, Amit Gupta, Madhubanti Mukherjee; MWSCAS 2017.

TEACHING EXPERIENCE

University of California, Los Angeles   2017 - 2018
Teaching Assistant

Computational Genetics (Spring 2018)
Computer Systems Architecture (Winter 2018)
Introduction to Computer Organization (Fall 2017)

INDUSTRY EXPERIENCE

Omics Data Automation   2016 - 2019
· Full-time summer intern

Intel   2012 - 2016
· Health Strategy & Solutions Group 2013 - 2016
· Heterogeneous Computing Group 2012 - 2013