

IDENTIFYING INFORMATION:

NAME: Owens, John

ORCID iD: <https://orcid.org/0000-0001-6582-8237>

POSITION TITLE: Child Family Professor of Engineering and Entrepreneurship

PRIMARY ORGANIZATION AND LOCATION: University of California, Davis, Davis, California, United States

Professional Preparation:

ORGANIZATION AND LOCATION	DEGREE (if applicable)	RECEIPT DATE	FIELD OF STUDY
Stanford University, Stanford, California, United States	PHD	01/2003	Electrical Engineering
Stanford University, Stanford, California, United States	MS	03/1997	Electrical Engineering
University of California, Berkeley, Berkeley, California, United States	BS	05/1995	Electrical Engineering and Computer Sciences

Appointments and Positions

2014 - present Child Family Professor of Engineering and Entrepreneurship, University of California, Davis, Department of Electrical and Computer Engineering, Davis, California, United States

2012 - 2012 Software Engineer, Twitter, Runtime Systems Group, San Francisco, California, United States

2008 - 2014 Associate Professor, University of California, Davis, Department of Electrical and Computer Engineering, Davis, California, United States

2003 - 2008 Assistant Professor, University of California, Davis, Department of Electrical and Computer Engineering, Davis, California, United States

1995 - 2002 Research Assistant, Stanford University, Department of Electrical Engineering, Stanford, California, United States

Products**Products Most Closely Related to the Proposed Project**

1. Chen Y, Brock B, Porumbescu S, Buluç A, Yelick K, Owens J. Scalable Irregular Parallelism with GPUs: Getting CPUs Out of the Way. Proceedings of the International Conference on High Performance Computing, Networking, Storage and Analysis. 2022 November; :708-723. Available from: <http://dx.doi.org/10.1109/SC41404.2022.00055> DOI: 10.1109/SC41404.2022.00055
2. Wang Y, Pan Y, Davidson A, Wu Y, Yang C, Wang L, Osama M, Yuan C, Liu W, Riffel A, Owens J. Gunrock: GPU Graph Analytics. ACM Transactions on Parallel Computing. 2017; 4(1):3:1-3:49. Available from: <http://escholarship.org/uc/item/9gj6r1dj> DOI: 10.1145/3108140
3. Pan Y, Pearce R, Owens J. Scalable Breadth-First Search on a GPU Cluster. Proceedings of the 32nd IEEE International Parallel and Distributed Processing Symposium. 2018; :1090-1101.

Available from: <https://escholarship.org/uc/item/9bd842z6> DOI: 10.1109/IPDPS.2018.00118

4. Stuart J, Owens J. Message Passing on Data-Parallel Architectures. Proceedings of the 23rd IEEE International Parallel and Distributed Processing Symposium. 2009. Available from: <https://escholarship.org/uc/item/1vc4t6jg> DOI: 10.1109/IPDPS.2009.5161065
5. Awad M, Ashkiani S, Porumbescu S, Farach-Colton M, Owens J. Analyzing and Implementing GPU Hash Tables. SIAM Symposium on Algorithmic Principles of Computer Systems. 2023; :33-50. Available from: <https://escholarship.org/uc/item/6cb1q6rz> DOI: 10.1137/1.9781611977578.ch3

Other Significant Products, Whether or Not Related to the Proposed Project

1. Owens J, Luebke D, Govindaraju N, Harris M, Krüger J, Lefohn A, Purcell T. A Survey of General-Purpose Computation on Graphics Hardware. Computer Graphics Forum. 2007; 26(1):80-113. Available from: <https://escholarship.org/uc/item/9ns2d70c> DOI: 10.1111/j.1467-8659.2007.01012.x
2. Yang C, Buluç A, Owens J. GraphBLAST: A High-Performance Linear Algebra-based Graph Framework on the GPU. ACM Transactions on Mathematical Software. 2022; 48(1):1:1-1:51. Available from: <https://escholarship.org/uc/item/292901ks> DOI: 10.1145/3466795
3. Ashkiani S, Farach-Colton M, Owens J. A Dynamic Hash Table for the GPU. Proceedings of the 32nd IEEE International Parallel and Distributed Processing Symposium. 2018; :419-429. Available from: <https://escholarship.org/uc/item/2p48q0zg> DOI: 10.1109/IPDPS.2018.00052
4. Owens J, Houston M, Luebke D, Green S, Stone J, Phillips J. GPU Computing. Proceedings of the IEEE. 2008; 96(5):879-899. Available from: <http://escholarship.org/uc/item/0cv1p1nc> DOI: 10.1109/JPROC.2008.917757
5. Alcantara D, Sharf A, Abbasinejad F, Sengupta S, Mitzenmacher M, Owens J, Amenta N. Real-Time Parallel Hashing on the GPU. ACM Transactions on Graphics. 2009 December; 28(5):154:1-154:9. Available from: <https://escholarship.org/uc/item/445536d6> DOI: 10.1145/1661412.1618500

Synergistic Activities

1. Chair, OpenCilk Academic Board, 2022–present
2. Instructor, Udacity CS 344, “Introduction to Parallel Programming” (with D. Luebke), as a massively open online course (MOOC). 90,000+ students.
3. Session chair for 2016 US Frontiers of Engineering (also attended 2015 US-China FOE and 2013 US FOE).
4. NVIDIA CUDA Fellow (2012–present). PI, NVIDIA AI Center at UC Davis (2019–present).
5. Instructor, courses on general-purpose computation on graphics hardware, IEEE Visualization IEEE/ACM Supercomputing, ACM SIGGRAPH, Int’l Ph.D. School in Algorithms for Advanced Processor Architectures.

Certification:

When the individual signs the certification on behalf of themselves, they are certifying that the information is current, accurate, and complete. This includes, but is not limited to, information related to domestic and foreign appointments and positions. Misrepresentations and/or omissions may be subject to prosecution and liability pursuant to, but not limited to, 18 U.S.C. §§ 287, 1001, 1031 and 31

U.S.C. §§ 3729-3733 and 3802.

Certified by Owens, John in SciENcv on 2024-01-04 13:36:43