BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.
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NAME: Owens, John

eRA COMMONS USER NAME (credential, e.g., agency login):

POSITION TITLE: Child Family Professor of Engineering and Entrepreneurship

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

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

A. Personal Statement

Products Most Closely Related to the Proposed Project

1. 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
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. 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
4. 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

B. Positions, Scientific Appointments and Honors

Positions and Scientific Appointments

2014 -	Child Family Professor of Engineering and Entrepreneurship, University of California, Davis, Department of Electrical and Computer Engineering, Davis, California
2012 - 2012	Software Engineer, Twitter, Runtime Systems Group, San Francisco, California
2008 - 2014	Associate Professor, University of California, Davis, Department of Electrical and Computer Engineering, Davis, California
2003 - 2008	Assistant Professor, University of California, Davis, Department of Electrical and Computer Engineering, Davis, California
1995 - 2002	Research Assistant, Stanford University, Department of Electrical Engineering, Stanford, California

Honors

2021	Fellow, American Association for the Advancement of Science (AAAS)
2021	Fellow, IEEE

2012 CUDA Fellow, NVIDIA

C. Contribution to Science

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

    a. 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

    b. 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

    c. 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

    d. 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. Synergistic Activities

    • Chair, OpenCilk Academic Board, 2022–present

    • Instructor, Udacity CS 344, “Introduction to Parallel Programming” (with D. Luebke), as a massively open online course (MOOC). 100,000+ students