Chris Gregg

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Education:

Ph.D., Computer Engineering, University of Virginia, 2012.
Advisor: Kim Hazelwood
Dissertation: *A Data and Contention Aware Approach to Dynamic Scheduling for Heterogeneous Processors*.

M.Eng., Computer Engineering, University of Virginia, 2010.

M.Ed., Education, Harvard University, 2002.
Program: Teaching and Curriculum, concentration in secondary school physics.

B.S., Electrical Engineering, Johns Hopkins University, 1994.

Appointments and Employment:

Stanford University, Associate Professor (Teaching), Computer Science. Fall 2023-Present.

Stanford University, Senior Lecturer, Computer Science. Fall 2022-Fall 2023.

Stanford University, Lecturer, Computer Science. Fall 2016-Fall 2022.

Kira Learning, Head of Computer Science Education, April 2022-December 2024

Reach University, Consultant, nascent Bachelor of Arts in Liberal Studies program, Technology and Information Systems. Spring 2016 – Present

Northeastern University, Consultant, Align M.S. C.S. Program. Spring 2019 – Present.

Facebook, Contractor, Artificial Intelligence Infrastructure team, Software Engineering. Summer 2019.

United States Navy Reserves, Commander, Information Warfare. 2004 – 2018 (Part Time).

Tufts University, Lecturer, Computer Science. Winter 2014-Summer 2016.

University of Maryland, University College, Djibouti, Africa, Adjunct Assistant Professor, Science and Mathematics. Fall 2012 – Fall 2013.

Adjunct Lecturer, Computer Architecture, University of Virginia. Fall 2012.

Teacher, University of Virginia Summer Enrichment Program, University of Virginia, Summer 2011 / Winter 2011.

Advanced Micro Devices, Intern. Summer 2010.

Teacher, Brookline High School, Brookline, MA, Physics and Computer Science. Fall 2002 – Summer 2004, Fall 2005 – Summer 2008.

Teacher, Pacific Collegiate School, Santa Cruz, CA, Physics. Fall 2004 – Summer 2005.

Teaching Fellow, Harvard Graduate School of Education, Literacy and Learning. Fall 2003.

United States Navy Active Duty, Lieutenant, Cryptologic Officer. 1994 – 2001.

Professional Activities:

SIGCSE Executive Board, Member-at-Large, 2025-Present

Associate Editor, ACM *Transactions on Computing Education*, 2025-Present

Member, Association for Computing Machinery, 2008 – Present.

Organizing Committee, SIGCSE, Student Volunteers Chair, 2020/2022.

Technical Symposium Reviewer, SIGCSE 2018, 2019, 2020, 2021, 2022, 2023, 2025

University and Departmental Service:

CS Department Associate Chair for Education, Fall 2022-Present

M.S. Program Director, Fall 2021 – Fall 2022

CS Department Executive Committee, Fall 2020 – Present

M.S. Admissions Committee, 2017-2019

Curriculum Committee, 2018-2019, Chair 2022-Present

Awards and Honors:

Stanford University:
> Professor of the Year, Stanford Society of Latinx Engineers, 2021

> Tau Beta Pi Teaching Honor Roll, 2017-18, 2018-19, 2020-21, 2024-25

University of Virginia:
> All-University Graduate Teaching Award in Math, Science, and Engineering, 2011-2012

> Computer Science Outstanding Teaching Award, 2011-2012.

Pacific Collegiate School:
> Teacher of the Year, 2004-2005

Selected Invited Talks:

Building AI Literacy in Schools
East Asia Regional Council of Schools (EARCOS) Leadership Conference, Bangkok, Thailand. October 2024

Technological Miniaturization: Where We've Been,
Where We're Going. Technology Over the Past 60 Years
The International Young Researchers' Conference. December 2023

Fostering Community Among CS Educators (and a bit of AI)
Computer Science Teachers Association Conference. July 2023

Secrets of the Digital World
Cybersecurity for All training program, Correlation One. September 2022.

Introducing Programming in Python to Middle School Students, and Autograding Hundreds of Students
Stratford Middle Schools Computer Science Workshop. March 2022.

Thoughts on Teaching with Exploding Enrollment
University of Southern California Information Technology Program. February, 2022.

Publications:

Refereed journal publications

Note: In computer architecture and CS education (SIGCSE), refereed conferences are the primary publication venues, and the convention is that authors' names are listed in the order of primary work on a submission.

J1　Wesolowski, L., Acun, B., Andrei, V., Aziz, A., Dankel, G., **Gregg, C**., Meng, X., Meurillon, C., Sheahan, D., Tian, L., Yang, J., Yu, P., Hazelwood, K. "Datacenter-Scale Analysis and Optimization of GPU Machine Learning Workloads," in *IEEE Micro*, vol. 41, no. 5, pp. 101-112, 1 Sept.-Oct. 2021, doi: 10.1109/MM.2021.3097287.

Refereed conference / symposia publications

C1　Jefferson, T.J., **Gregg, C.**, Piech, C., "PyodideU: Unlocking Python Entirely in a Browser for CS1," Proceedings of the 55th **SIGCSE** Technical Symposium on Computer Science Education. Portland, OR, March 2024.

C2　Reckinger, S. M., **Gregg, C.**, Hughes, B. E. (2021, July), *Social-belonging Intervention in a Computer Science Systems Course* Paper presented at 2021 *ASEE* Virtual Annual Conference Content Access, Virtual Conference. https://peer.asee.org/37719

C3　Piech, C., **Gregg, C.** "BlueBook: A Computerized Replacement for Paper Tests in Computer Science," Proceedings of the 48th **SIGCSE** Technical Symposium on Computer Science Education. Baltimore, MD, February 2018.

C4　**Gregg, C.**, Duvall, R, Wasynczuk, K. "A Modern Wearable Devices Course for Computer Science Undergraduates," Proceedings of the 47th *SIGCSE* Technical Symposium on Computer Science Education. Seattle, WA, March 2017.

C5　**Gregg, C.**, Tychonievich, L., Hazelwood, K., Cohoon, J. "Parallel Programming in Elementary School," Proceedings of the 42nd **SIGCSE** Technical Symposium on Computer Science Education. Raleigh, NC, February 2012.

C6　**Gregg, C.,** Dorn, J., Hazelwood, K., Skadron, K. (2012). Fine-Grained Resource Sharing for Concurrent GPGPU Kernels. In 4th USENIX Workshop on Hot Topics in Parallelism (**HotPar** 12).

C7　**Gregg, C.**, Boyer, M., Hazelwood, K., Skadron, K. "Dynamic Heterogeneous Scheduling Decisions Using Historical Runtime Data," Proceedings of the 2nd Workshop on Applications for Multi-and Many-Core Processors. San Jose, CA, June 2011.

C8　Mistry, P., Ubal, R., Kaeli, D., Rubin, N., **Gregg, C..** "Developing Portable Profiling and Performance Analysis Tools for Heterogeneous Applications." AMD Fusion Developer Summit 2011, Bellevue, WA, June, 2011.

C9　**Gregg, C.**, Hazelwood, K. "Where Is the Data? Why You Cannot Debate CPU vs. GPU Performance Without the Answer," International Symposium on Performance Analysis of Systems and Software (**ISPASS**). Austin, TX. April 2011.

C10　Mistry, P., **Gregg, C.,** Rubin, N., Kaeli, D., Hazelwood, K. "Analyzing Program Flow within a Many-Kernel OpenCL Application," Fourth Workshop on General Purpose Processing on Graphics Processing Units (GPGPU-4). Newport Beach, CA. March, 2011.

C11　**Gregg, C.,** Brantley, J., Hazelwood, K. "Contention-Aware Scheduling of Parallel Code for Heterogeneous Systems," 2nd USENIX Workshop on Hot Topics in Parallelism (HotPar'10). June 2010.

C12　Guevara, M., **Gregg, C.,** Hazelwood, K., Skadron, K. "Enabling Task Parallelism in the CUDA Scheduler," in Programming Models and Emerging Architectures Workshop (Parallel Architectures and Compilation Techniques Conference, 2009).

Non-refereed Conference/Symposia Proceedings

C13　O. Glebova, **Gregg, C.**, M. McDaniel, Strange, L. "Teaching Track Faculty in Computer Science", Birds of a Feather, 55th **SIGCSE** Technical Symposium on Computer Science Education. Portland, OR, February 2024.

C14　**Gregg, C.**, Strange, L. "Teaching Track Faculty in Computer Science", Birds of a Feather, 53rd **SIGCSE** Technical Symposium on Computer Science Education. Providence, RI, February 2022.

C15　**Gregg, C.**, Strange, L. "Teaching Track Faculty in Computer Science", Birds of a Feather, 49th **SIGCSE** Technical Symposium on Computer Science Education. Minneapolis, MN, February 2019.

C16　**Gregg, C.,** Sherriff, M. "Teaching Track Faculty in Computer Science", Birds of a Feather, 48th **SIGCSE** Technical Symposium on Computer Science Education. Baltimore, MD, February 2018.

C17　**Gregg, C.,** Hescott, B. "How Do We Provide Effective Student Advising and Mentoring During Record Growth?", Birds of a Feather, 48th **SIGCSE** Technical Symposium on Computer Science Education. Baltimore, MD, February 2018.

C18　**Gregg, C.,** Sherriff, M., Lupoli, S. "Teaching Track Faculty in Computer Science", Birds of a Feather, 47th **SIGCSE** Technical Symposium on Computer Science Education. Seattle, WA, March 2017.

C19　**Gregg, C.,** Lewis, C. "How Do You Teach Debugging? Resources and Strategies for Better Student Debugging.", Birds of a Feather, 46th **SIGCSE** Technical Symposium on Computer Science Education. Memphis, TN, March 2016

C20 **Gregg, C.,** Lewis, C. "Working with Undergraduate Teaching Assistants: Best Practices and Lessons Learned", Birds of a Feather, 45th **SIGCSE** Technical Symposium on Computer Science Education. Kansas City, MO, March 2015.

Books in Print

Gregg, C. *Your First Year Teaching Computer Science: A Practical Guide to Success for New Computer Science Teachers. Alinea Learning,* February 2021.