Yipeng Huang

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Academic Appointments

Rutgers University
Assistant Professor — September 2020–present

Princeton University
Postdoctoral Research Associate — June 2018–August 2020
Advisor: Dr. Margaret Martonosi

Education

Columbia University
Ph.D., computer science — 2018
Dissertation: Hybrid Analog-Digital Co-Processing for Scientific Computation
Advisor: Dr. Simha Sethumadhavan

M.Phil., computer science — 2015
M.S., computer science — 2013
B.S. *magna cum laude*, computer engineering, minor in economics — 2011

Honors and Awards

- IEEE Micro Top Picks from the Computer Architecture Conferences honorable mention: 2018, 2022
- Rising Stars in Computer Architecture Workshop 2019 participant (one of seven)
- Heidelberg Laureate Forum 2017 participant
- IEEE Micro Top Picks from the 2016 Computer Architecture Conferences (one of 12)
- DARPA Small Business Technology Transfer Phase I grant (for investigating analog computing applications)
- Columbia University Computer Engineering Award of Excellence (annual departmental award)
- Columbia University George Vincent Wendell Memorial Medal nominee (annual school award)

Publications

Conference Publications

Sdim: A High-Dimensional Stabilizer Simulator
Adeeb Kabir, Steven Nguyen, Sohan Ghosh, James Keppens, Tijil Kiran, Yipeng Huang, Isaac Kim and Bart Sorée
IEEE International Conference on Quantum Computing and Engineering (QCE), Toronto, Canada, 2026

Toward Scalable Gate-Level Parallelism on Trapped-Ion Processors with Racetrack Electrodes
Enhyeok Jang, Hyungseok Kim, Yongju Lee, Jaewon Kwon, Won Woo Ro, and Yipeng Huang
IEEE International Symposium on High-Performance Computer Architecture (HPCA), Sydney, Australia, 2026

Monte Carlo Qudit Stabilizer Sampling with Pauli Frames
A. Kabir and Y. Huang
IEEE International Conference on Quantum Computing and Engineering (QCE), Albuquerque, NM, 2025

Genesis: A Compiler for Hamiltonian Simulation on Hybrid CV-DV Quantum Computers
Zihan Chen, Jiakang Li, Minghao Guo, Henry Chen, Zirui Li, Joel Bierman, Yipeng Huang, Huiyang Zhou, Yuan Liu, and Eddy Z. Zhang
ACM/IEEE International Symposium on Computer Architecture (ISCA), Tokyo, Japan, 2025

Qubit Movement-Optimized Program Generation on Zoned Neutral Atom Processors
Enhyeok Jang, Youngmin Kim, Hyungseok Kim, Seungwoo Choi, Yipeng Huang, and Won Woo Ro
International Symposium on Code Generation and Optimization (CGO), Las Vegas, NV, 2025

Tetris: A Compilation Framework for VQA Applications in Quantum Computing
Yuwei Jin, Zirui Li, Fei Hua, Tianyi Hao, Huiyang Zhou, Yipeng Huang, and Eddy Z. Zhang
ACM/IEEE International Symposium on Computer Architecture (ISCA), Buenos Aires, Argentina, 2024
Distinguished Artifact Award

Noisy Variational Quantum Algorithm Simulation via Knowledge Compilation for Repeated Inference
Yipeng Huang, Steven Holtzen, Todd Millstein, Guy Van den Broeck, and Margaret Martonosi
ACM International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS), Detroit, MI, 2021
Acceptance rate $= 75/398 \approx 18.8\%$
IEEE Micro Top Picks from the 2021 Computer Architecture Conferences honorable mention

Statistical Assertions for Validating Patterns and Finding Bugs in Quantum Programs
Yipeng Huang and Margaret Martonosi
ACM/IEEE International Symposium on Computer Architecture (ISCA), Phoenix, AZ, 2019
Acceptance rate $= 62/365 \approx 17.0\%$

Hybrid Analog-Digital Solution of Nonlinear Partial Differential Equations
Yipeng Huang, Ning Guo, Mingoo Seok, Yannis Tsividis, Kyle Mandli, and Simha Sethumadhavan
IEEE/ACM International Symposium on Microarchitecture (MICRO), Cambridge, MA, 2017
Acceptance rate $= 61/327 \approx 18.7\%$
IEEE Micro Top Picks from the 2017 Computer Architecture Conferences honorable mention

Evaluation of an Analog Accelerator for Linear Algebra
Yipeng Huang, Ning Guo, Mingoo Seok, Yannis Tsividis, and Simha Sethumadhavan
ACM/IEEE International Symposium on Computer Architecture (ISCA), Seoul, South Korea, 2016
Acceptance rate $= 57/291 \approx 19.6\%$
IEEE Micro Top Picks from the 2016 Computer Architecture Conferences

RoboBench: Towards Sustainable Robotics System Benchmarking
Jonathan Weisz, Yipeng Huang, Florian Lier, Simha Sethumadhavan, and Peter K. Allen
IEEE International Conference on Robotics and Automation (ICRA), Stockholm, Sweden, 2016

Continuous-Time Hybrid Computation with Programmable Nonlinearities
Ning Guo, Yipeng Huang, Tao Mai, Sharvil Patil, Chi Cao, Mingoo Seok, Simha Sethumadhavan, and Yannis Tsividis
European Solid-State Circuits Conference (ESSCIRC), Graz, Austria, 2015
Invited for submission to the IEEE Journal of Solid-State Circuits

Journal Publications

Layerwise retraining and freezing for multi-angle QAOA
Enhyeok Jang, Zihan Chen, Dongho Ha, Seungwoo Choi, Yongju Lee, Jaewon Kwon, Eddy Z. Zhang, Yipeng Huang & Won Woo Ro
Quantum Machine Intelligence, Volume 8, article number 5, January 2026

Towards an Accelerator for Differential and Algebraic Equations Useful to Scientists
J. Garcia-Mallen, S. Ping, A. Miralles-Cordal, I. Martin, M. Ramakrishnan and Y. Huang
IEEE Computer Architecture Letters (CAL), vol. 22, no. 2, pp. 185-188, July-Dec. 2023

Architectures / Systems: Dynamical Systems: Differential Equation Solving
Yipeng Huang
International Roadmap for Devices and Systems (IRDS), chapter on Beyond CMOS and Emerging Research Materials. 2022.

Analog Computing in a Modern Context: A Linear Algebra Accelerator Case Study
Yipeng Huang, Ning Guo, Mingoo Seok, Yannis Tsividis, and Simha Sethumadhavan
IEEE Micro, Top Picks Special Issue, vol. 37, no. 3, pp. 30-38, 2017

Energy-Efficient Hybrid Analog/Digital Approximate Computation in Continuous Time
Ning Guo, Yipeng Huang, Tao Mai, Sharvil Patil, Chi Cao, Mingoo Seok, Simha Sethumadhavan, and Yannis Tsividis
IEEE Journal of Solid-State Circuits (JSSC), vol. 51, no. 7, pp. 1514-1524, July 2016

Trustworthy Hardware from Untrusted Components
Simha Sethumadhavan, Adam Waksman, Matthew Suozzo, Yipeng Huang, and Julianna Eum
Communications of the ACM, vol. 58, no. 9, pp. 60-71, August 2015"

Workshop Papers

Asymmetric Gates for Distributed Quantum Computing
Haoyan Lou, Allison Klingler, Winston Li, Pooja Kedia, Enhyeok Jang, Alexei Ashikhmin, and Yipeng Huang
The First International Workshop on Networked Quantum Systems and Applications (NetQSA),
IEEE International Conference on Network Protocols (ICNP), Tempe, AZ, October, 2026

Asymmetric Gates for Distributed Quantum Computing
Haoyan Lou, Winston Li, Pooja Kedia, Enhyeok Jang, Won Woo Ro, Alexei Ashikhmin, and Yipeng Huang
The Eighth Young Architect Workshop (YArch),
ACM/IEEE International Symposium on Computer Architecture (ISCA), Raleigh, NC, June 2026

A Qudit Stabilizer Circuit Simulator
Adeeb Kabir, Anika Kumar, Steven Nguyen, and Yipeng Huang
The Sixth Young Architect Workshop (YArch),
ACM International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS), San Diego, CA, April 2024

The Approximation of Density Matrices
Zirui Li and Yipeng Huang
The Sixth Young Architect Workshop (YArch),
ACM International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS), San Diego, CA, April 2024

Towards an Accelerator for Differential and Algebraic Equations Useful to Scientists
Jonathan Garcia-Mallen, Shuohao Ping, Alex Miralles-Cordal, Ian Martin, Mukund Ramakrishnan, and Yipeng Huang
2nd Workshop on Democratizing Domain-Specific Accelerators,
IEEE/ACM International Symposium on Microarchitecture (MICRO), Toronto, Canada, October 2023

Logic Formulas as Program Abstractions for Quantum Circuits: A Case Study in Noisy Variational Algorithm Simulation
Yipeng Huang, Steven Holtzen, Todd Millstein, Guy Van den Broeck, and Margaret Martonosi
First International Workshop on Quantum Computing Software,
The International Conference for High Performance Computing, Networking, Storage, and Analysis (SC),
Virtual, November 2020

QDB: From Quantum Algorithms Towards Correct Quantum Programs
Yipeng Huang and Margaret Martonosi
PLATEAU Workshop,
ACM conference on Systems, Programming, Languages and Applications: Software for Humanity (SPLASH),
Boston, MA, November 2018

Dissertation

Hybrid Analog-Digital Co-Processing for Scientific Computation
Committee: Simha Sethumadhavan, Yannis Tsividis, Margaret Martonosi, Martha Kim, and Kyle Mandli
Nominated by Columbia University Computer Science Department for the ACM Doctoral Dissertation Award

Selected Presentations

Tutorial Presentations

Adventures in High-Dimensional Quantum Error Correction in Python
Adeeb Kabir, Steven Nguyen, Sohan Ghosh, Yipeng Huang
Tutorials at IEEE International Conference on Quantum Computing and Engineering (QCE),
Albuquerque, NM, September 2025

Invited Talks

From reconfigurable code-efficient ansatzes toward useful quantum computing
UMBC Quantum Science Institute, Baltimore, MD, April 2026
Host: Lei Zhang

From reconfigurable code-efficient ansatzes toward useful quantum computing
Quantum Computer Systems Lecture Series, April 2026
Host: Enhyeok Jang

Reconfigurable quantum architecture and codes: Implications on correctness, efficiency, and security
NSF Workshop of Hardware Security in the Era of Quantum Computing & Post-Quantum Cryptography
King of Prussia, PA March 2026
Host: Jiafeng Xie

Towards Accurate, Scalable, and Efficient Quantum Hamiltonian Simulation
DIMACS Research Experiences for Undergraduates in Algorithms, New Brunswick, NJ, June 2025
Host: Lazaros Gallos

Adventures in High-Dimensional Quantum Error Correction
DIMACS Workshop on Quantum Software Systems and Theory, New Brunswick, NJ, May 2025
Host: Lirong Xia, Nengkun Yu, Zheng Zhang

Towards Accurate, Scalable, and Efficient Quantum Hamiltonian Simulation
Rutgers-Newark Department of Physics, Newark, NJ, March 2025
Host: Xuejian Wu

Quantum Computing Trends
Korea Institute for Advancement of Technology, December 2024
Host: Minsung Kim

Keynote: Quantum Computing State-of-the-Art
1st Workshop on Broadly Accessible Quantum Computing,
ACM Practice and Experience in Advanced Research Computing (PEARC), Providence, RI, July 2024
Host: Bruno Abreu

Quantum Software Stacks Should Eschew Quantum Circuits
Workshop on the Quantum System Software Stack at the National Science Foundation, Alexandria, VA, June 2024
Hosts: Samee Khan, Qiang Guan, and Vipin Chaudhary

Extensions of Multivalue and Analog Computing into the Quantum Realm
Peking University Institute for Artificial Intelligence and School of Integrated Circuits, Virtual, June 2022
Host: Zhong Sun

Graphical Models and Logical Abstractions for Quantum Systems
Princeton ACM / IEEE Computer Society Chapter, Virtual, November 2021
Host: Brian Berenbach

Graphical Models and Logical Abstractions for Quantum Systems
UC Berkeley Challenge Institute for Quantum Information, Virtual, November 2021
Host: John Kubiatowicz

Graphical Models and Logical Abstractions for Quantum Systems
UC Santa Cruz Baskin School of Engineering Hardware Systems Collective, Virtual, October 2021
Host: Tyler Sorensen

Logical Abstractions for Noisy Variational Quantum Algorithm Simulation
IBM Quantum Hub at NC State Quantum Lunch Series, Virtual, April 2021
Host: Huiyang Zhou

Emerging Architectures for Humanity's Grand Challenges
UC San Diego Department of Computer Science, Virtual, April 2020

Emerging Architectures for Humanity's Grand Challenges
University of Washington Department of Computer Science, Virtual, April 2020

Emerging Architectures for Humanity's Grand Challenges
Tufts University Department of Electrical and Computer Engineering, Boston, MA, March 2020

Emerging Architectures for Humanity's Grand Challenges
Rutgers University Department of Computer Science, New Brunswick, NJ, February 2020

Emerging Architectures for Humanity's Grand Challenges
UC Santa Barbara Department of Electrical and Computer Engineering, Santa Barbara, CA, February 2020

Emerging Architectures for Humanity's Grand Challenges
University of Wisconsin Department of Electrical and Computer Engineering, Madison, WI, February 2020

Emerging Architectures for Humanity's Grand Challenges
Georgia Tech Rising Stars in Computer Architecture (RISC-A) Workshop, Atlanta, GA, October 2019
Hosts: Alex Daglis and Tushar Krishna

Probabilistic Inference and Statistical Tests for Correct Quantum Programs
Sandia National Laboratories Assessing Performance of Quantum Computers Workshop, Estes Park, CO, September 2019
Host: Robin Blume-Kohout

Knowledge Compilation-Based Exact Inference for Quantum Simulation
ISCA/FCRC Quantum Resource Estimation Workshop, Phoenix, AZ, June 2019
Hosts: Alexandru Paler, Simon Devitt, and Daniel Herr

Approximate Computing Across the (Quantum) Stack
PLDI/FCRC Workshop on Approximate Computing Across the Stack, Phoenix, AZ, June 2019
Host: Ulya Karpuzcu

A Case Study in Analog Co-Processing for Solving Stochastic Differential Equations
IEEE International Conference on Digital Signal Processing, Shanghai, China, November 2018
Hosts: Arjuna Madanayake, Zhiping Lin, and Sankar Basu

Hybrid Analog-Digital Co-Processor for Scientific Computation
DARPA Accelerated Computation for Efficient Scientific Simulation (ACCESS) Principal Investigators' Meeting, Arlington, VA, December 2016
Host: Vincent Tang

Selected Posters

Sdim: A Qudit Stabilizer Simulator
Adeeb Kabir, Steven Nguyen, Tijil Kiran, Anika Kumar, Yipeng Huang
Fifth International Workshop on Programming Languages for Quantum Computing (PLanQC),
52nd ACM SIGPLAN Symposium on Principles of Programming Languages (POPL), Denver, CO, January 2025

Understanding Correlated Error Events in Quantum Computers
ACM Student Research Competition (SRC),
31st International Conference on Parallel Architectures and Compilation Techniques (PACT), Chicago, IL, October 2022

Hybrid Analog-Digital Accelerator for Differential and Algebraic Equations
IEEE International Conference on Rebooting Computing, Tysons Corner, VA, November 2017

Hybrid Analog-Digital Solution of Nonlinear Partial Differential Equations
Heidelberg Laureate Forum, Heidelberg, Germany, September 2017

Grants and Gifts

Research on Quantum Pulse Latency Reduction through Quantum Optimal Control Framework
Funded international collaboration via National Research Foundation of Korea (NRF),
Quantum Information Science and Human Resources Development Program

A hybrid quantum and classical computing software platform
4/12/2023; Grant amount: $25,000; Columbia University Millard Chan '99 Technology Challenge Award

I-Corp: A quantum and classic bridge
2/15/2023–7/31/2024; Grant amount: $50,000; NSF award number TI-2311595

Hybrid Analog-Digital Co-Processor for Scientific Computation
I was the principal investigator for this Small Business Technology Transfer grant,
in response to DARPA's Accelerated Computation for Efficient Scientific Simulation (ACCESS) program.
The research was conducted at a startup I founded, Allegory Labs, LLC, with Columbia University as a subcontractor.
Grant amount: $100,000; DoD DARPA contract number D16PC00089

Research Artifacts & Impact

sdim: A qudit stabilizer simulator for novel quantum error correction codes
The simulator has been used at UC Davis and KU Leuven for research in qudit quantum error correction.

Columbia University Prototype Analog Accelerators
I was a part of a team that taped-out two iterations of analog accelerators for solving differential and algebraic equations.
I led the effort in building the chips' digital interfaces, validating the chips' functionality, and programming the chips.
The prototypes have been used at MIT, Ulm University, Sendyne Corporation, and Allegory Labs, LLC for further research.

Press Mentions

Headline	Publication	Date
Quantum computing: Finding solutions by the people for the people	phys.org	Aug. 9, 2024
Columbia Entrepreneurs Win Seed Funding at Millard Chan '99 Tech Challenge	Columbia News	Apr. 28, 2023
Quantum computing made easier through new debugging tools	Science Times	July 4, 2019
Researchers make steps toward debugging tools for quantum computers	phys.org	June 21, 2019
Not your father's analog computer	IEEE Spectrum	Dec. 1, 2017
Maths on a boat: Yipeng Huang and analog computing	maths.org Plus magazine	Oct. 10, 2017
Back to analog computing: Columbia researchers merge analog and digital computing on a single chip	Columbia CS press release	Nov. 22, 2016

Teaching Experience

Role	Course	Primary instructor	Term
Instructor	Rutgers University 01:198:211 Computer Architecture (undergraduate course in C, architecture, and digital logic)	-	Spring 2021, Spring 2022, Spring 2023, Spring 2024, Fall 2025, Fall 2026
Instructor	Rutgers University 16:198:672 & 16:198:558 & 01:198:443 Quantum Computing: Programs and Systems (graduate course in quantum applications and realizations)	-	Fall 2020, Fall 2021, Fall 2022, Spring 2024, Spring 2026
Mentor	Center for Discrete Mathematics and Theoretical Computer Science (DIMACS) NSF Research Experience for Undergraduates (REU) mentor for Allison Klingler	-	2026
Mentor	Aresty Research Assistant Program mentor for Winston Li, Pooja Kedia, Pedro Torres, Parth Karekar, Maria Xu, Steven Nguyen, Arpan Gupta, Michael Schleppy, Ian Martin, and Aayushi Kasera *Gupta and Schleppy's work won the first place at the ACM Student Research Competition undergraduate division* *Schleppy received the NSF GRFP in 2025*	-	2021 - 2026
Mentor	Computer Science independent study mentor for Tijil Kiran, Rut Mehta, Neel Shejwalkar, Jackson Lee, and Mukund Ramakrishnan *Lee received the Barry Goldwater Scholarship in 2023*	-	2022 - 2025
Mentor	Computer Science Honors Capstone Program mentor for Anika Kumar, Mayank Barad, Arpan Gupta, Cyrus Majd, and Alex Miralles-Cordal *Kumar's work won the departmental Hagerty Award* *Gupta's work won the Henry Rutgers Scholar Award*	-	2022 - 2025
Mentor	Undergraduate thesis advisor for Soham Palande *Palande's work won the 2022 Chancellor-Provost's Research Excellence Award*	-	2021 - 2022
Mentor	Quantum Undergraduate Research at IBM and Princeton (QURIP) mentor for Emma Dasgupta and Lia Yeh *Their work won the bronze medal at the ACM Student Research Competition undergraduate division at MICRO 2019*	Margaret Martonosi	Summer 2019
Mentor	Undergraduate thesis mentor for Lois Dzebissov	Margaret Martonosi	Fall 2018
Mentor	Undergraduate research project mentor for Lusa Zhan	Simha Sethumadhavan	Fall 2016
Mentor	Masters research project mentor for Mingrui Liu and Kenneth Harvey	Simha Sethumadhavan	Spring 2015
Teaching assistant	Columbia University EECS 4340 Computer Hardware Design (graduate course in RTL design, validation, synthesis)	Simha Sethumadhavan	Fall 2012, Fall 2014

Academic Service

Role	Venue	Years
PC	Programming Languages and Quantum Computing workshop at POPL/PLDI (PLanQC)	2020, 2021, 2027
PC	IEEE/ACM International Symposium on Microarchitecture (MICRO)	2020, 2021, 2022, 2026
PC	Young Architect Workshop at ISCA and ASPLOS (YArch)	2025, 2026
PC	IEEE International Symposium on High Performance Computer Architecture (HPCA)	2021, 2022, 2023, 2026
PC	ACM/IEEE International Symposium on Computer Architecture (ISCA)	2023, 2025
PC	ACM International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS)	2024
PC	IEEE International Conference on Quantum Computing and Engineering (QCE)	2021, 2022
PC	Brookhaven National Laboratory New York Scientific Data Summit	2020
TPC	The International Conference for High Performance Computing, Networking, Storage, and Analysis (SC)	2025
ERC	ACM International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS)	2019, 2025, 2026
ERC	ACM/IEEE International Symposium on Computer Architecture (ISCA)	2019, 2020, 2022
ERC	IEEE/ACM International Symposium on Microarchitecture (MICRO)	2019, 2024, 2025
ERC	IEEE International Symposium on High Performance Computer Architecture (HPCA)	2024, 2025
Reviewer	Nature Electronics	2025
Reviewer	ACM Transactions on Quantum Computing (TQC)	2020, 2024
Reviewer	ACM Transactions on Architecture and Code Optimization (TACO)	2024
Reviewer	IEEE Micro Magazine	2017, 2018, 2021
Session chair	ACM/IEEE International Symposium on Computer Architecture (ISCA)	2023
Session chair	IEEE International Symposium on High Performance Computer Architecture (HPCA)	2021, 2022
Dissertation committee	Yuwei Jin, Rutgers University	Dec. 17, 2024
Dissertation committee	Fei Hua, Rutgers University	Dec. 12, 2024
Dissertation committee	Xin Hong, University of Technology Sydney	2023
Dissertation committee	Mohammadreza Soltaniyeh, Rutgers University	Jul. 12, 2022
Exam chair	Qualifying exam, Adeeb Kabir, Rutgers University	Oct. 31, 2025
Exam chair	Qualifying exam, Jonathan García-Mallén, Rutgers University	Jun. 26, 2025
Exam chair	Qualifying exam, Zirui Li, Rutgers University	May 8, 2025
Examiner	Qualifying exam, Yuhan Liu, Rutgers University	Apr. 22, 2026
Examiner	Qualifying exam, Yuwei Jin, Rutgers University	May 9, 2023
Examiner	Qualifying exam, Fei Hua, Rutgers University	Sep. 13, 2021

Science Education Outreach, Leadership, and Professional Memberships

Organization	Role	Years
2nd Workshop on Broadly Accessible Quantum Computing at ACM Practice and Experience in Advanced Research Computing	Organizer	2025
DIMACS Workshop on Quantum Software Systems and Theory	Organizational committee	2025
National Science Foundation Computer and Information Science and Engineering (CISE) Graduate Fellowships (CSGrad4US)	Reviewer	2022
Undergrad Architecture Mentoring (uArch) Workshop	Panelist	2022
Summer Science Program, International (high school astrophysics summer program)	Admissions committee	2019–2022
New York Hall of Science STEM Night	Panelist	October 2019
FIRST Robotics Competition	Team mentor	Spring 2014
Western Aerospace Scholars at the Seattle Museum of Flight	Summer residency mentor	2012, 2013
Columbia Daily Spectator	Staff director & design editor	2007–2010
Association for Computing Machinery SIGARCH, SIGMICRO	Member	2012–present

Professional Experience

Sendyne — New York, NY
Research Intern — Summer 2017
- Developed novel stochastic application-specific integrated circuit for financial modeling applications

Allegory Labs, LLC — New York, NY
Founder & Principal Investigator — Nov. 2015–May 2017
- Founded IP-backed startup via $100K Small Business Technology Transfer federal government contract
- Collaborated with university subcontractor to research new class of analog continuous-time numerical methods
- Identified and assessed commercial potential in modern scientific computation applications
- Communicated with DARPA in-person and in response to request for information, phase I, and phase II proposals

Boeing — Seattle, WA
Information Technology Career Foundation Program Participant — June 2011–July 2012
- Built MPI interface to parallelize computational fluid dynamics and engineering geometry applications

ZS Associates — New York, NY
Business Information Specialist Intern — Summer 2010

Hutchison Port Holdings — Hong Kong
Information Technology Intern — Summer 2009

Technical Tools & Languages

Quantum: IBM Qiskit, Google Cirq, Microsoft ProjectQ, Scaffold

Hardware: SystemC, SystemVerilog, Synopsys, Cadence, Xilinx, Altera EDA tools for ASIC/FPGA

Software: Nvidia CUDA Thrust, Open MPI, Robot Operating System, C/C++, Java, Python, MATLAB, Docker