

I am a biomedical imaging and visualization researcher who investigates how computational methods can accelerate biological and medical research.

Education

2019 PhD in Computer Science, Harvard University Cambridge, MA

Analyzing Brain Connectivity and Computing Machine Perception

Advisor: Hanspeter Pfister

Committee: Steven Gortler, Finale Doshi-Velez, Scott Kuindersma, Jeff W. Lichtman

2010 Diplom (MSc) in Medical Computer Science, University of Heidelberg Germany

Signal- and Image Processing

Thesis: Coronary Artery Centerline Extraction Advisors: Hartmut Dickhaus, Ron Kikinis

2007 Vordiplom (BSc) in Medical Computer Science, University of Heidelberg Germany

with Honors, rank #1 of class, all study fees waived

Experience

2019-present University of Massachusetts Boston Boston, MA

Assistant Professor of Computer Science (Tenure-track) Director of the Machine Psychology research group

Associate of the Harvard John A. Paulson School of Engineering and Applied Sciences

Summer 2017 Apple, Inc. Cupertino, CA

Research Intern in Data Science

Mental Canvas Summer 2014

New York City, NY

Research Intern in Computer Graphics

2011-2013 Boston Children's Hospital Boston, MA

Research Software Developer III, Fetal Neonatal Neuroimaging and Developmental Science Center

Advisors: Rudolph Pienaar, P. Ellen Grant

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Experience (continued)

2010–2011 University of Pennsylvania Philadelphia, PA

Research Scholar, Section for Biomedical Image Analysis

Advisor: Kilian Pohl

2009 German Cancer Research Center (DKFZ) and BioQuant Center Heidelberg, Germany

Research Assistant, Biomedical Computer Vision and Experimental Radiology Research Groups

Advisors: Stefan Wörz, Hendrik von Tengg-Kobligk

2008–2009 Brigham and Women's Hospital Boston, MA

Fellow, Department of Radiology and the Surgical Planning Laboratory

Advisors: Ron Kikinis, Steve Pieper, Luca Antiga

Publications

From UMass Boston (* undergraduate student, ** graduate student; all peer-reviewed)

Neha Goyal**, Yahiya Hussain*, Gianna G. Yang*, and Daniel Haehn. Real-Time Alignment for Connectomics.

Springer LNCS: Biomedical Image Registration (WBIR).

2022 François Rheault, Valérie Hayot-Sasson, Robert E. Smith, Christopher Rorden, Jacques-Donald Tournier, Eleft-

herios Garyfallidis, Fang-Cheng Yeh, Christopher J. Markiewicz, Matthew Brett, Ben Jeurissen, Paul A. Taylor, D. Baran Aydogan, Derek A. Pisner, Serge Koudoro, Soichi Hayashi, <u>Daniel Haehn</u>, Steve Pieper, Daniel Bullock, Emanuele Olivetti, Jean-Christophe Houde, Marc-Alexandre Côté, Flavio Dell'Acqua, Alexander Leemans, Maxime Descoteaux, Bennett Landman, Franco Pestilli, and Ariel Rokem. TRX: A community-oriented trac-

tography file format. OHBM 2022-Human Brain Mapping (Oral).

Jay Burkhardt*, Aaryaman Sharma*, Jack Tan*, Loraine Franke**, Jahnavi Leburu**, Jay Jeschke, Sasha De-

vore, Daniel Friedman, Jingyun Chen, and Daniel Haehn. N-Tools-Browser: Web-Based Visualization of Elec-

trocorticography Data for Epilepsy Surgery. Frontiers in Bioinformatics.

2022 Katharina Paulick, Simon Seidel, Christoph Lange, Annina Kemmer, Mariano Nicolas Cruz-Bournazou, An-

dré Baier, and <u>Daniel Haehn</u>. Promoting Sustainability through Next-Generation Biologics Drug Develop-

ment. MDPI Sustainability.

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Publications (continued)

From UMass Boston (continued) (* undergraduate student, ** graduate student)

2022	Nalini M. Singh, Jordan B. Harrod, Sandya Subramanian, Mitchell Robinson, Ken Chang, Suheyla Cetin-Karayumak, Adrian Vasile Dalca, Simon Eickhoff, Michael Fox, Loraine Franke**, Polina Golland, <u>Daniel Haehn</u> , Juan Eugenio Iglesias, Lauren J. O'Donnell, Yangming Ou, Yogesh Rathi, Shan H. Siddiqi, Haoqi Sun, M. Brandon Westover, Susan Whitfield-Gabrieli, and Randy L. Gollub. How Machine Learning is Powering Neuroimaging to Improve Brain Health. <i>Neuroinformatics</i> .
2021	Bella Baidak*, Yahiya Hussain*, Emma Kelminson*, Thouis R. Jones, Loraine Franke**, and <u>Daniel Haehn</u> . CellProfiler Analyst Web (CPAW) - Exploration, analysis, and classification of biological images on the web. <i>IEEE Visualization Short Paper (IEEE VIS)</i> .
2021	Loraine Franke**, Daniel Karl I Weidele, Fan Zhang, Suheyla Cetin-Karayumak, Steve Pieper, Lauren J O'Donnell, Yogesh Rathi, and <u>Daniel Haehn</u> . FiberStars: Visual Comparison of Diffusion Tractography Data between Multiple Subjects. <i>IEEE Pacific Visualization (PacificVis)</i> .
2020	Loraine Franke** and <u>Daniel Haehn</u> . Modern Scientific Visualizations on the Web. MDPI Informatics.
2020	<u>Daniel Haehn</u> , Loraine Franke**, Fan Zhang, Suheyla Cetin Karayumak, Steve Pieper, Lauren O'Donnell, and Yogesh Rathi. TRAKO: Efficient Transmission of Tractography Data for Visualization. <i>Medical Image Computing and Computer-Assisted Intervention (MICCAI)</i> .
2020	Vincent Casser, Kai Kang, Hanspeter Pfister, and <u>Daniel Haehn</u> . Fast Mitochondria Detection for Connectomics. International Conference on Medical Imaging with Deep Learning (Spotlight Award at MIDL).
2020	Zudi Lin, Donglai Wei, Won-Dong Jang, Siyan Zhou, Xupeng Chen, Xueying Wang, Richard L. Schalek, Daniel R. Berger, Brian Matejek, Lee D. Kamentsky, Adi Peleg, <u>Daniel Haehn</u> , Thouis R. Jones, Toufiq Parag, Jeff W. Lichtman, and Hanspeter Pfister. Two-Stream Active Query Suggestion for Large-Scale Object Detection in Connectomics. <i>European Conference on Computer Vision (ECCV)</i> .
2020	Fritz Lekschas, Brant Peterson, <u>Daniel Haehn</u> , Eric Ma, Nils Gehlenborg, and Hanspeter Pfister. <u>Peax: Interactive Visual Pattern Search in Sequential Data Using Unsupervised Deep Representation Learning</u> . <i>Computer Graphics Forum (Best Paper Award at EuroVis)</i> .

Prior to UMass Boston

2019 Brian Matejek, <u>Daniel Haehn</u>, Haidong Zhu, Donglai Wei, Toufiq Parag, and Hanspeter Pfister. <u>Biologically-Constrained Graphs for Global Connectomics Reconstruction</u>. *IEEE Computer Vision and Pattern Recognition*

(CVPR).

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Publications (continued)

Prior to UMass Boston (continued)

2018	<u>Daniel Haehn</u> , James Tompkin, and Hanspeter Pfister. Evaluating 'Graphical Perception' with CNNs . <i>IEEE Transactions on Visualization and Computer Graphics (IEEE VIS)</i> .
2018	<u>Daniel Haehn</u> , Verena Kaynig, James Tompkin, Jeff W. Lichtman, and Hanspeter Pfister. Guided Proofreading of Automatic Segmentations for Connectomics. <i>IEEE Computer Vision and Pattern Recognition (CVPR)</i> .
2017	<u>Daniel Haehn</u> , John Hoffer, Brian Matejek, Adi Suissa-Peleg, Ali K. Al-Awami, Lee Kamentsky, Felix Gonda, Eagon Meng, William Zhang, Richard Schalek, Alyssa Wilson, Toufiq Parag, Johanna Beyer, Verena Kaynig, Thouis R. Jones, James Tompkin, Markus Hadwiger, Jeff W. Lichtman, and Hanspeter Pfister. Scalable Interactive Visualization for Connectomics . <i>MDPI Informatics</i> .
2017	Brian Matejek, <u>Daniel Haehn</u> , Fritz Lekschas, Michael Mitzenmacher, and Hanspeter Pfister. Compresso: Efficient Compression of Segmentation Data For Connectomics. <i>Medical Image Computing and Computer-Assisted Intervention (MICCAI)</i> .
2017	Felix Gonda, Verena Kaynig, Thouis R. Jones, <u>Daniel Haehn</u> , Jeff W. Lichtman, Toufiq Parag, and Hanspeter Pfister. ICON: An Interactive Approach to train Deep Neural Networks for Segmentation of Neuronal Structures. <i>IEEE International Symposium on Biomedical Imaging (ISBI)</i> .
2017	Rudolph Pienaar, Ata Turk, Jorge Bernal-Rusiel, Nicolas Rannou, <u>Daniel Haehn</u> , P. Ellen Grant, and Orran Krieger. CHIPSA Service for Collecting, Organizing, Processing, and Sharing Medical Image Data in the Cloud. <i>VLDB Workshop on Data Management and Analytics for Medicine and Healthcare</i> .
2016	Adi Suissa-Peleg, <u>Daniel Haehn</u> , Seymour Knowles-Barley, Verena Kaynig, Thouis R. Jones, Alyssa Wilson, Richard Schalek, Jeff W. Lichtman, and Hanspeter Pfister. <u>Automatic Neural Reconstruction from Petavoxel of Electron Microscopy Data</u> . <i>Microscopy and Microanalysis</i> .
2016	Ali K. Al-Awami, Johanna Beyer, <u>Daniel Haehn</u> , Narayanan Kasthuri, Jeff W. Lichtman, Hanspeter Pfister, and Markus Hadwiger. NeuroBlocksVisualTracking of Segmentation and Proofreading for Large Connectomics Projects . <i>IEEE Transactions on Visualization and Computer Graphics (IEEE VIS)</i> .
2016	Richard Schalek, Dong Lee, Narayanan Kasthuri, Adi Peleg, Thouis R. Jones, Verena Kaynig, <u>Daniel Haehn</u> , Hanspeter Pfister, David Cox, and Jeff W. Lichtman. Imaging a 1 mm ³ Volume of Rat Cortex using a Multi-Beam SEM. <i>Microscopy and Microanalysis</i> .
2015	Kiho Im, Banu Ahtam, <u>Daniel Haehn</u> , Jurriaan M. Peters, Simon K. Warfield, Mustafa Sahin, and P. Ellen Grant. Altered Structural Brain Networks in Tuberous Sclerosis Complex. <i>Cerebral Cortex</i> .

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Publications (continued)

Prior to UMass Boston (continued)

	(
2015	Rudolph Pienaar, Nicolas Rannou, Jorge Bernal, <u>Daniel Haehn</u> , and P. Ellen Grant. ChRISA web-based Neuroimaging and Informatics System for Collecting, Organizing, Processing, Visualizing and Sharing of Medical Data. <i>IEEE Engineering in Medicine and Biology Society (EMBC)</i> .
2014	<u>Daniel Haehn</u> , Seymour Knowles-Barley, Mike Roberts, Johanna Beyer, Narayanan Kasthuri, Jeff W. Lichtman, and Hanspeter Pfister. <u>Design and Evaluation of Interactive Proofreading Tools for Connectomics</u> . <i>IEEE Transactions on Visualization and Computer Graphics (IEEE VIS)</i> .
2013	<u>Daniel Haehn</u> , Nicolas Rannou, P. Ellen Grant, and Rudolph Pienaar. Slice:Drop Collaborative Medical Imaging in the Browser. <i>ACM SIGGRAPH Computer Animation Festival</i> .
2012	<u>Daniel Haehn</u> , Nicolas Rannou, Banu Ahtam, P. Ellen Grant, and Rudolph Pienaar. Neuroimaging in the Browser using the X Toolkit . <i>Frontiers in Neuroinformatics (Spotlight Award at INCF Neuroinformatics)</i> .
2012	Myong-sun Choe, Silvia Ortiz-Mantilla, Nikos Makris, Matt Gregas, Janine Bacic, <u>Daniel Haehn</u> , David Kennedy, Rudolph Pienaar, Verne S. Caviness Jr, April A. Benasich, and P. Ellen Grant. Regional Infant Brain Development: an MRI-based Morphometric Analysis in 3 to 13 month olds. <i>Cerebral Cortex</i> .
2012	Arno Klein, Forrest S. Bao, Yrjö Häme, Eliezer Stavsky, Joachim Giard, <u>Daniel Haehn</u> , Nolan Nichols, and Satra- jit S. Ghosh. <u>Mindboggle: Automated Human Brain MRI Feature Extraction, Labeling, Morphometry, and</u> <u>Online Visualization</u> . <i>Frontiers in Neuroinformatics</i> .
2012	Arno Klein, Nolan Nichols, and <u>Daniel Haehn</u> . Mindboggle 2 interface : Online Visualization of Extracted Brain Features with XTK . <i>Frontiers in Neuroinformatics</i> .

Grants

Funded (* Principal Investigator)

2022–2024	Sloan Foundation Grant: Culture Change in Computer Science and Engineering at the University of Mas-
	sachusettsPublicUniversitySystem:APartnershipBetweenUMassBostonandAmherst,UMBSite-PI(Co-PI-Co
	Kimberly Hamad Schifferli, UMass Amherst: Pl Nilanjana (Buju) Dasgupta, Co-Pl Neena Thota, Co-Pl Shannon
	Roberts), \$499,972.00 (UMB share \$184,228.00)
2021–2023	National Institutes of Health, R21: Real-time visualization and precision targeting in transcranial magnetic
	stimulation, Co-PI (PI Lipeng Ning, Harvard Medical School), \$493,011.00 (UMB share \$156,663.00)
2021–2022	UMass Boston, Proposal Development Grant: Towards Developing Deep Learning Approaches for Protein-
	Protein Interaction Detection, Co-PI (PI Nurit Haspel, UMB), \$20,000.00

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Grants (continued)

Funded (continued) (* Principal Investigator)

2020-2023	*Massachusetts Life Sciences Center, Bits to Bytes: The Oregon-Massachusetts Mammography Database
	(OMAMA-DB), (Co-Pls Haspel, Tonyushkin, Pomplun, Simovici; UMB), \$749,834.00
2020	Federal Ministry of Education and Research Germany: International Future Labs for Artificial Intelligence in
	collaboration with the KIWI Biolab at the Technical University Berlin (covering 18 months exchange visits of a
	PostDoc and a Ph.D. student), (PI Cruz-Bournazou, TU Berlin)
2019	*NVidia Accelerated Data Science GPU Grant, 1x Titan V100 GPU

Presentations

* invited presentation

2022	*Speaker at the High Performance Computing Day: Processing of Massive Biological Datasets at UMB
2022	*Speaker at Visualizing Biological Data (VIZBI): Masterclass on Scientific Visualization
2021	*Presenter at the UMass Summit for AI, Data Science, and Robotics
2020	*Presenter at the Creative Commons Global Summit: The 7 Levels of Open Science
2020	Presenter at the National Alliance for Medical Image Computing Project Week: Integrating TRAKO with 3D Slicer
2020	*Speaker at the Fetal Neonatal Developmental Science Center, Boston Children's Hospital: Scientific Visualization at Scale!
2020	Paper presentation at International Conference on Medical Image Computing and Computer Assisted In-
	tervention: TRAKO: Efficient Transmission of Tractography Data for Visualization
2020	*Speaker at the Lymph Node Quantification Project, Harvard Medical School: Machine-Guided Annotation
	Methods
2020	Paper presentation at Medical Imaging with Deep Learning (MIDL): Fast Mitochondria Detection for Connec-
	tomics
2020	*Presentation at the UMass Boston-Dana Farber/Harvard Cancer Center initiative: Guided Tumor Detection and Annotation Methods for Cancer Imaging
2020	*Speaker at the Massachusetts Life Sciences Center: The Oregon-Massachusetts Mammography Database
2020	*Researcher at Shonan Meeting No. 167 in Japan: Formalizing Biological and Medical Visualization
2019	*Speaker at Sarah Frisken's Lab, Harvard Medical School: Brain Connectivity, Machine Perception, and Com-
	puter Graphics - all at different scales!
2019	*Speaker at Suffolk University: Brain Connectivity and Machine Perception
2019	*Speaker at the MIT McGovern Institute: The Performance Gap between the Brain and Al
2018	Paper presentation at IEEE Visualization: Evaluating 'Graphical Perception' with CNNs

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Presentations (continued)

* invited presentation

Harvard Visual Computing Group meeting presentation: The 7 Levels of Open Science
*Speaker at Brown University, Department of Computer Science: Analyzing Brain Connectivity and Comput-
ing Machine Perception
*Speaker at IBM Research (AI Systems Day): Evaluating 'Graphical Perception' with CNNs
Harvard Visual Computing Group meeting presentation: Guided Proofreading of Automatic Segmentations
for Connectomics
*Speaker at the IEEE Visualization Doctoral Colloquium: Proofreading for Connectomics
Harvard Lichtman Lab meeting presentation: Interactive Proofreading Tools for Connectomics
Paper presentation at IEEE Visualization: Design and Evaluation of Interactive Proofreading Tools for Connec-
tomics
Harvard Visual Computing Group meeting presentation: Proofreading Tools for Connectomics
*Speaker at the MIT Computer Graphics Group: Web-based Visualization of Scientific Data
Harvard Visual Computing Group meeting presentation: Interactive Proofreading with Dojo
Harvard Lichtman Lab meeting presentation: Web-based Visualization and Proofreading for Connectomics
Harvard Visual Computing Group meeting presentation: Web-based Scientific Visualization
*Speaker at Visualizing Biological Data (VIZBI): Physiology & Function
Spotlight presentation at INCF Neuroinfomatics: Neuroimaging in the Browser using the X Toolkit
*Speaker at WebGL Camp Orlando: WebGL for Baby Brains

Awards

2022	Selected for Oral Presentation at ISMRM Neuromodulation for TMS Visualization
2022	Selected for Oral Presentation at the Organization for Human Brain Mapping for TRX
2020	Best Paper Award at EuroVis for Peax
2020	Spotlight Award at MIDL: Fast Mitochondria Detection for Connectomics
2020	Al Scientist of the Future for the KIWI Biolab at the Technical University Berlin, Germany
2015-2019	Winkler Scholarship
2013-2019	Harvard University Fellowship
2013	Real-Time Live! presentation of Slice:Drop at SIGGRAPH
2012	INCF Neuroinformatics Spotlight Award for XTK
2012	Mozilla Hacks WebGL Dev Derby Runner-up for Slice:Drop
2012	Visualizing.org VisWeek Challenge Winner with Slice:Drop

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Awards (continued)

1st Prize for End User Tutorial at the National Alliance of Medical Image Computing (NA-MIC) 2010

2008-2009 Karl Steinbuch Foundation Scholarship Thomas Gessmann Foundation Scholarship 2007-2009

Teaching

At UMass Boston (* re-designed course, ** new course, main instructor unless indicated)

2022	Guest Lecturer for CS615 User Interface Design
2022	CS480/CS697 Special Topics: Biomedical Signal and Image Processing (27 students, Instructor rating: 5/5,
	Course rating: 4.93/5)
2022	CS410 Introduction to Software Engineering (62 students, Instructor rating: 4.23/5, Course rating: 4.41/5)
2022	Guest Lecturer for BIOL693 Seminar in Neurobiology
2021	Guest Lecturer for CS615 User Interface Design
2021	CS460 Graphics (20 students, Instructor rating: 5/5, Course rating: 4.94/5)
2021	**CS480/CS697 Special Topics: Biomedical Signal and Image Processing (27 students, Instructor rating:
	4.8/5, Course rating: 4.75/5)
2021	CS410 Introduction to Software Engineering (47 students, Instructor rating: 4.59/5, Course rating: 4.45/5)
2020	CS460 Graphics (28 students, Instructor rating: 4.9/5, Course rating: 4.9/5)
2020	*CS410 Introduction to Software Engineering (27 students, Instructor rating: 4.87/5, Course rating:
	4.73/5)
2019	**CS460 Graphics (24 students, Instructor rating: 4.81/5, Course rating: 4.57/5)
2019	Guest Lecturer for two lectures of the CS187 Science Gateway Seminar

Outside UMass Boston

2021	Guest Lecturer for CSCI2254 Web Application Development at Boston College
2020	Guest Lecturer for CSCI2254 Web Application Development at Boston College
2019	Guest Lecturer for the CMPSC131 Computer Science course at Suffolk University
2018–2019	TEALS Volunteer for AP Computer Science at Cambridge Rindge and Latin School
2016	Technical Assistant for the Deep Learning mini-course at the Harvard IACS Compute Fest
2015	Teaching Fellow for the Harvard CS171 Visualization course
2008	Workshop for Advanced Microcontroller Programming, University of Bratislava, Slovakia
2008	Workshop for Microcontroller Programming at the University of Tbilisi, Georgia (Europe)
2004–2008	Teaching Assistant for the Microcontrollers in EXperiment and LEarning (MEXLE) educational platform, Heil-
	bronn University, Germany

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Mentoring

Graduate Students (PhD)

2022–present	Mahsa Geshvadi, Computer Science, University of Massachusetts Boston
2020-present	Kristin (Yanan) Qi, Computational Sciences, University of Massachusetts Boston

2021 Hayoun Oh, Computer Science, Harvard University (co-mentored)

2020-2021 Aswin Vasudevan, Computer Science, University of Massachusetts Boston 2019-present Loraine Franke, Computer Science, University of Massachusetts Boston 2019-2021 Jesse Freeman, Computer Science, University of Massachusetts Boston

Graduate Students (MS)

2022-present	Kunal Jain, Computer Science, University of Massachusetts Boston
2022-present	Kiran Sandilya, Computer Science, University of Massachusetts Boston
2022-present	Jenna (JieHyun) Kim, Computer Science, University of Massachusetts Boston
2022	Pablo Bendiksen, Computer Science, University of Massachusetts Boston
2021-present	Neha Goyal, Computer Science, University of Massachusetts Boston
2020	Jiali Cheng, Computer Science, Northeastern University

2020 Gianna Yang, Computer Science, University of Massachusetts Boston 2020 Barkha Java, Computer Science, University of Massachusetts Boston 2019 Manish Mourya, Computer Science, University of Massachusetts Boston

2018-2020 Vincent Casser, Computer Science, Harvard University

2010-2011 Suares Tamekue, Intern at Brigham and Women's Hospital (co-mentored)

Undergraduate and Pre-College Students

Josh Kotler, Computer Science, University of Massachusetts Boston
Ryan Zurrin, Computer Science, University of Massachusetts Boston
Akshata Tiwari, Pre-college student at Aliso Niguel High School
Kendrick Kheav, Biochemistry, University of Massachusetts Boston

2022 Nikol Vladinska, Conputer Science and Honors Thesis, University of Massachusetts Boston

2021-2022 Jay Burkhardt, Computer Science, University of Massachusetts Boston

2021 Isabelle Lara, Biology, University of Massachusetts Boston 2021 Patricia Somera, Biology, University of Massachusetts Boston

2021 Bella Baidak, Computer Science, University of Massachusetts Boston 2019-2021 Yahiya Hussain, Computer Science, University of Massachusetts Boston

2019-2021 Nandinii Yeleswarapu, Computer Science and Honors Thesis, University of Massachusetts Boston

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Mentoring (continued)

Undergraduate and Pre-College Students (continued)

2019–2020	Safwa Ali, Engineering, University of Massachusetts Boston
2019–2020	Huda Irshad, Engineering, University of Massachusetts Boston

2018-2020 Ian Svetkey, Pre-college student at Harvard University 2016 Eagon Meng, Computer Science, Harvard University 2016 Omar Shaikh, (Remote-) Intern at Harvard University 2015-2017 John Hoffer, Computer Science, Harvard University

2015 William Zhang, Pre-college student at Harvard University

2013 Jay Andrew Robinson, Intern at Boston Children's Hospital (co-mentored)

2013 Emily Seibring, Intern at Boston Children's Hospital (co-mentored)

Service and Outreach

Departmental Level

2022	Faculty Advisor for	or the Compute	r Science Club

Organizer of Events and Discord Server for CS+IT Students 2020-present 2020 Member of the Paul English Scholarship Committee 2019-present Member of the Outreach and Publicity Committee Member of the Student Recruitment Committee 2019-present

2019-2020 Organizer of bi-weekly social events for IT and CS students

College and University Level

2022	Member of the Research Computing Hiring Committee
2022	Member of the Data Science Faculty Search Committee
2022	Member of the Joint Discipline & Grievance Committee
2020-present	Member of the Research Computing Advisory Committee

2020-2021 STEM Educational Excellence (STEM-EdX) Fellow

2020 Member of the Data Science Faculty Search Committee

Professional Activities

2022	National Science Foundation Reviewer and Panelist for SBIR Grants
2022	Program Committee member at the IEEE Visualization conference

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Service and Outreach (continued)

Professional Activities (continued)

2022	Topic Editor: Open Source for Open Science, Frontiers in Neuroinformatics
2021	Program Committee member at the IEEE Visualization conference
2021	Faculty Mentor at the MGH Neuroimaging 2021 Virtual Symposium
2021	Organizer of the Chart Question Answering Workshop at CVPR 2021 in collaboration with Harvard, Columbia,
	Northwestern, and UMass Amherst
2021	National Science Foundation Reviewer and Panelist for SBIR Grants
2020	Program Committee member for short papers at the IEEE Visualization conference
2018-present	Reviewer for Manning Publications
2016-present	Reviewer for Frontiers in Neuroinformatics, ISMRM, Neuroinformatics, Frontiers in Neural Circuits, ACM
	SIGCHI, IEEE CVPR, IEEE Visualization / Transactions on Visualization and Computer Graphics, IEEE Access,
	MDPI Applied Sciences, Nature Communications Biology, Scientific Reports, Transactions on Pattern Anal-
	ysis and Machine Intelligence, Nature, Computer & Graphics

Technical Reviewer for Matsuda and Lea: WebGL Programming Guide, Addison-Wesley

Community Service

2013

2022	Member of the Principal Search Committee for the Putnam Ave Upper School in Cambridge
2019-2020	Advisor for the AP Data Science Curriculum in Cambridge Public Schools
2018-2019	Head Coach for Cambridge Youth Soccer
2018	Volunteer+Presentation Facilitator at the Cambridge 8th Grade Science & Engineering Showcase
2007-2010	President of the Student Computer Club at Heilbronn University, StuWoNet e.V.
2007-2009	Voluntary Project Lead of RANDI2, a randomization software for clinical trials at the German Cancer Research
	Center (DKFZ), coordinating 15+ developers
1997-1999	Vice-President of The German Computer Freaks, a National Cyber Security Club

My Erdős Number is 3.

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