

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

## Education

- |      |   |               |
|------|---|---------------|
| 2019 | <b>PhD in Computer Science, Harvard University</b><br><i>Analyzing Brain Connectivity and Computing Machine Perception</i><br>Advisor: Hanspeter Pfister<br>Committee: Steven Gortler, Finale Doshi-Velez, Scott Kuindersma, Jeff W. Lichtman | Cambridge, MA |
| 2010 | <b>Diplom (MSc) in Medical Computer Science, University of Heidelberg</b><br><i>Signal- and Image Processing</i><br>Thesis: Coronary Artery Centerline Extraction<br>Advisors: Hartmut Dickhaus, Ron Kikinis                                  | Germany       |
| 2007 | <b>Vordiplom (BSc) in Medical Computer Science, University of Heidelberg</b><br><i>with Honors, rank #1 of class, all study fees waived</i>   | Germany       |

## Experience

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|--------------|--|-------------------|
| 2019–present | <b>University of Massachusetts Boston</b><br><i>Assistant Professor of Computer Science (Tenure-track)</i><br><i>Director of the Machine Psychology research group</i><br><i>Associate of the Harvard John A. Paulson School of Engineering and Applied Sciences</i> | Boston, MA        |
| Summer 2017  | <b>Apple, Inc.</b><br><i>Research Intern in Data Science</i>   | Cupertino, CA     |
| Summer 2014  | <b>Mental Canvas</b><br><i>Research Intern in Computer Graphics</i>  | New York City, NY |
| 2011–2013    | <b>Boston Children's Hospital</b><br><i>Research Software Developer III, Fetal Neonatal Neuroimaging and Developmental Science Center</i><br>Advisors: Rudolph Pienaar, P. Ellen Grant   | Boston, MA        |

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)

2023      Ryan Zurrin\*, Neha Goyal\*\*, Pablo Bendiksen\*\*, Muskaan Manocha\*\*, Dan Simovici, Nurit Haspel, Marc Pomplun, and Daniel Haehn. **Outlier Detection for Mammograms**. *International Conference on Medical Imaging with Deep Learning (MIDL)*.

2023      Ramin Dehghanpoor\*\*, Fatemeh Afrasiabi\*\*, Charles Fogel\*, Tung Dao\*, Suman Gautam\*, Aanab Nehela\*, Ahmad Nehela\*, Daniel Haehn, and Nurit Haspel. **Classifying Protein Families with Learned Compressed Representations**. *International Conference on Bioinformatics (Best Paper Award at BICOB)*.

2023      Daniel Karl I. Weidele, Shazia Afzal, Abel N. Valente, Cole Makuch, Owen Cornec, Long Vu, Dharmashankar Subramanian, Werner Geyer, Rahul Nair, Inge Vejsbjerg, Radu Marinescu, Paulito Palmes, Elizabeth M. Daly, Loraine Franke\*\*, and Daniel Haehn. **AutoDOViz: Human-Centered Automation for Decision Optimization**. *ACM International Conference on Intelligent User Interfaces (IUI)*.

2022      Neha Goyal\*\*, Yahiya Hussain\*, Gianna G. Yang\*, and Daniel Haehn. **Real-Time Alignment for Connectomics**. *Springer LNCS: Biomedical Image Registration (WBIR)*.

2022      Francois Rheault, Valérie Hayot-Sasson, Robert E. Smith, Christopher Rorden, Jacques-Donald Tournier, Eleftherios Garyfallidis, Fang-Cheng Yeh, Christopher J. Markiewicz, Matthew Brett, Ben Jeurissen, Paul A. Taylor, D. Baran Aydogan, Derek A. Pisner, Serge Koudoro, Soichi Hayashi, Daniel Haehn, 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 tractography file format**. *OHBM 2022-Human Brain Mapping (Oral)*.

- 2022 Jay Burkhardt\*, Aaryaman Sharma\*, Jack Tan\*, Loraine Franke\*\*, Jahnvi Leburu\*\*, Jay Jeschke, Sasha Devore, Daniel Friedman, Jingyun Chen, and [Daniel Haehn](#). **N-Tools-Browser: Web-Based Visualization of Electrocardiography Data for Epilepsy Surgery.** *Frontiers in Bioinformatics*.
- 2022 Katharina Paulick, Simon Seidel, Christoph Lange, Annina Kemmer, Mariano Nicolas Cruz-Bournazou, André Baier, and [Daniel Haehn](#). **Promoting Sustainability through Next-Generation Biologics Drug Development.** *MDPI Sustainability*.
- 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, [Daniel Haehn](#), 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.** *Neuroinformatics*.
- 2021 Bella Baidak\*, Yahiya Hussain\*, Emma Kelminson\*, Thouis R. Jones, Loraine Franke\*\*, and [Daniel Haehn](#). **CellProfiler Analyst Web (CPAW) - Exploration, analysis, and classification of biological images on the web.** *IEEE Visualization Short Paper (IEEE VIS)*.
- 2021 Loraine Franke\*\*, Daniel Karl I Weidele, Fan Zhang, Suheyla Cetin-Karayumak, Steve Pieper, Lauren J O'Donnell, Yogesh Rathi, and [Daniel Haehn](#). **FiberStars: Visual Comparison of Diffusion Tractography Data between Multiple Subjects.** *IEEE Pacific Visualization (PacificVis)*.
- 2020 Loraine Franke\*\* and [Daniel Haehn](#). **Modern Scientific Visualizations on the Web.** *MDPI Informatics*.
- 2020 [Daniel Haehn](#), Loraine Franke\*\*, Fan Zhang, Suheyla Cetin Karayumak, Steve Pieper, Lauren O'Donnell, and Yogesh Rathi. **TRAKO: Efficient Transmission of Tractography Data for Visualization.** *Medical Image Computing and Computer-Assisted Intervention (MICCAI)*.
- 2020 Vincent Casser, Kai Kang, Hanspeter Pfister, and [Daniel Haehn](#). **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, [Daniel Haehn](#), Thouis R. Jones, Toufiq Parag, Jeff W. Lichtman, and Hanspeter Pfister. **Two-Stream Active Query Suggestion for Large-Scale Object Detection in Connectomics.** *European Conference on Computer Vision (ECCV)*.
- 2020 Fritz Lekschas, Brant Peterson, [Daniel Haehn](#), Eric Ma, Nils Gehlenborg, and Hanspeter Pfister. **Peax: Interactive Visual Pattern Search in Sequential Data Using Unsupervised Deep Representation Learning.** *Computer Graphics Forum (Best Paper Award at EuroVis)*.

## Prior to UMass Boston

- 2019 Brian Matejek, [Daniel Haehn](#), Haidong Zhu, Donglai Wei, Toufiq Parag, and Hanspeter Pfister. **Biologically-Constrained Graphs for Global Connectomics Reconstruction.** *IEEE Computer Vision and Pattern Recognition (CVPR)*.
- 2018 [Daniel Haehn](#), James Tompkin, and Hanspeter Pfister. **Evaluating 'Graphical Perception' with CNNs.** *IEEE Transactions on Visualization and Computer Graphics (IEEE VIS)*.
- 2018 [Daniel Haehn](#), Verena Kaynig, James Tompkin, Jeff W. Lichtman, and Hanspeter Pfister. **Guided Proofreading of Automatic Segmentations for Connectomics.** *IEEE Computer Vision and Pattern Recognition (CVPR)*.
- 2017 [Daniel Haehn](#), 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.** *MDPI Informatics*.
- 2017 Brian Matejek, [Daniel Haehn](#), Fritz Lekschas, Michael Mitzenmacher, and Hanspeter Pfister. **Compresso: Efficient Compression of Segmentation Data For Connectomics.** *Medical Image Computing and Computer-Assisted Intervention (MICCAI)*.
- 2017 Felix Gonda, Verena Kaynig, Thouis R. Jones, [Daniel Haehn](#), Jeff W. Lichtman, Toufiq Parag, and Hanspeter Pfister. **ICON: An Interactive Approach to train Deep Neural Networks for Segmentation of Neuronal Structures.** *IEEE International Symposium on Biomedical Imaging (ISBI)*.
- 2017 Rudolph Pienaar, Ata Turk, Jorge Bernal-Rusiel, Nicolas Rannou, [Daniel Haehn](#), P. Ellen Grant, and Orran Krieger. **CHIPS--A Service for Collecting, Organizing, Processing, and Sharing Medical Image Data in the Cloud.** *VLDB Workshop on Data Management and Analytics for Medicine and Healthcare*.
- 2016 Adi Suissa-Peleg, [Daniel Haehn](#), Seymour Knowles-Barley, Verena Kaynig, Thouis R. Jones, Alyssa Wilson, Richard Schalek, Jeff W. Lichtman, and Hanspeter Pfister. **Automatic Neural Reconstruction from Petavoxel of Electron Microscopy Data.** *Microscopy and Microanalysis*.
- 2016 Ali K. Al-Awami, Johanna Beyer, [Daniel Haehn](#), Narayanan Kasthuri, Jeff W. Lichtman, Hanspeter Pfister, and Markus Hadwiger. **NeuroBlocks--Visual Tracking of Segmentation and Proofreading for Large Connectomics Projects.** *IEEE Transactions on Visualization and Computer Graphics (IEEE VIS)*.
- 2016 Richard Schalek, Dong Lee, Narayanan Kasthuri, Adi Peleg, Thouis R. Jones, Verena Kaynig, [Daniel Haehn](#), Hanspeter Pfister, David Cox, and Jeff W. Lichtman. **Imaging a 1 mm<sup>3</sup> Volume of Rat Cortex using a Multi-Beam SEM.** *Microscopy and Microanalysis*.
- 2015 Kiho Im, Banu Ahtam, [Daniel Haehn](#), Jurriaan M. Peters, Simon K. Warfield, Mustafa Sahin, and P. Ellen Grant. **Altered Structural Brain Networks in Tuberous Sclerosis Complex.** *Cerebral Cortex*.

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

## Grants

### Funded (\* Principal Investigator)

- 2022–2024 Sloan Foundation Grant: **Culture Change in Computer Science and Engineering at the University of Massachusetts Public University System: A Partnership Between UMass Boston and Amherst**, UMB Site-PI (Co-PI Kimberly Hamad Schifferli, UMass Amherst: PI Nilanjana (Buju) Dasgupta, Co-PI Neena Thota, Co-PI Shannon Roberts), \$499,972.00 (UMB share \$238,948.00)
- 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

- 2020–2023 \*Massachusetts Life Sciences Center, Bits to Bytes: **The Oregon-Massachusetts Mammography Database (OMAMA-DB)**, (Co-PIs 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 Intervention: *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 Connectomics*
- 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 Computer 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 AI*
- 2018 Paper presentation at IEEE Visualization: *Evaluating 'Graphical Perception' with CNNs*

- 2018 Harvard Visual Computing Group meeting presentation: *The 7 Levels of Open Science*
- 2018 \*Speaker at Brown University, Department of Computer Science: *Analyzing Brain Connectivity and Computing Machine Perception*
- 2018 \*Speaker at IBM Research (AI Systems Day): *Evaluating 'Graphical Perception' with CNNs*
- 2017 Harvard Visual Computing Group meeting presentation: *Guided Proofreading of Automatic Segmentations for Connectomics*
- 2016 \*Speaker at the IEEE Visualization Doctoral Colloquium: *Proofreading for Connectomics*
- 2015 Harvard Lichtman Lab meeting presentation: *Interactive Proofreading Tools for Connectomics*
- 2014 Paper presentation at IEEE Visualization: *Design and Evaluation of Interactive Proofreading Tools for Connectomics*
- 2014 Harvard Visual Computing Group meeting presentation: *Proofreading Tools for Connectomics*
- 2014 \*Speaker at the MIT Computer Graphics Group: *Web-based Visualization of Scientific Data*
- 2014 Harvard Visual Computing Group meeting presentation: *Interactive Proofreading with Dojo*
- 2014 Harvard Lichtman Lab meeting presentation: *Web-based Visualization and Proofreading for Connectomics*
- 2013 Harvard Visual Computing Group meeting presentation: *Web-based Scientific Visualization*
- 2013 \*Speaker at Visualizing Biological Data (VIZBI): *Physiology & Function*
- 2012 Spotlight presentation at INCF Neuroinformatics: *Neuroimaging in the Browser using the X Toolkit*
- 2012 \*Speaker at WebGL Camp Orlando: *WebGL for Baby Brains*

## Awards

- 2023 Early Career Research Excellence Award in the College of Science and Mathematics at UMass Boston
- 2023 Best Paper Award at BICOB for Classifying Protein Families
- 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 AI 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
- 2010 1st Prize for End User Tutorial at the National Alliance of Medical Image Computing (NA-MIC)
- 2008–2009 Karl Steinbuch Foundation Scholarship
- 2007–2009 Thomas Gessmann Foundation Scholarship

## 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, Heilbronn University, Germany



## 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

2022–present	Josh Kotler, Computer Science, University of Massachusetts Boston
2022–present	Ryan Zurrin, Computer Science, University of Massachusetts Boston
2022–present	Akshata Tiwari, Pre-college student at Aliso Niguel High School
2022	Kendrick Kheav, Biochemistry, University of Massachusetts Boston
2022	Nikol Vladinska, Computer 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

### 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–present	Member of the Broadening Participation in Computing Task Force
2022–present	Faculty Advisor for the Computer Science Club
2020–present	Organizer of Events and Maintainer of the Discord Server for CS+IT Students
2020	Member of the Paul English Scholarship Committee
2019–present	Member of the Outreach and Publicity Committee
2019–present	Member of the Student Recruitment Committee
2019–2020	Organizer of bi-weekly social events for IT and CS students

### College and University Level

2023	Member of the Research Computing Hiring Committee
2022	Invited Researcher for the UMass President’s Office NSF Type 2 Engine proposal for Equitable Health
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
2021	Panelist for the Brain Trusts in AI/Robotics/Data Science Initiative from the UMass President’s Office
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
- 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 Analysis and Machine Intelligence*, *Nature*, *Computer & Graphics*
- 2013 Technical Reviewer for *Matsuda and Lea: WebGL Programming Guide*, Addison-Wesley

### Community Service

- 2023–present Volunteer for the Petey Greene Program to tutor incarcerated people
- 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.