Adam Li

Curriculum Vitae

Department of Computer Science
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(adam2392) Github *(adam2392) Linkedin* *Scholar*

Education

2022–present **Postdoctoral Fellowship (NSF Computing Innovation Fellow), Computer Science**, *Columbia University*.
Causality: causal discovery, representation learning, and applied causal AI

2015–2021 : **PhD, Biomedical Engineering**, *Johns Hopkins University*.
Localization of the Epileptogenic Zone: A Dynamical Systems Perspective

Honors: NSF GRFP, Whitaker Fellow, Chateuabriand Fellow (French Fulbright), Arcs Chapter Scholar

2019–2021 : **Master of Engineering, Applied Mathematics & Statistics**, *Johns Hopkins University*.
Statistical learning theory, optimization and graduate level linear algebra.

2010–2015 : **Bachelor of Science, Bioengineering & Applied Mathematics**, *University of California, San Diego*, 3.75/4.0.

Honors: Gordon Scholar, Tau Beta Pi, Provost' Honors

Publications (h-index 9; cited 420 times)

Selected Publications

2024 **Adam Li*, Samuel Curtis*, Sambit Panda*, ..., Joshua Vogelstein, and Bert Vogelstein**, Artificial Intelligence vs. the Truth - Exemplified by Blood Testing for Cance, In Review ***Science***.

2024 **Adam Li, Yushu Pan, Elias Bareinboim**, Disentangled representation learning in non-markovian causal systems., In Review ***NeurIPS***.

2021 **Adam Li, Chester Huynh, Zachary Fitzgerald, Iahn Cajigas, Damian Brusko, Angel Claudio, Jonathan Jagid, Andres Kanner, Jennifer Hopp, Stephanie Chen, et al.** , Neural fragility as an eeg marker of the seizure onset zone., **Nature Neuroscience** (Featured on the Cover).

2023 **Adam Li, Ronan Perry, Chester Huynh, Tyler M Tomita, Ronak Mehta, Jesus Arroyo, Jesse Patsolic, Ben Falk, Sridevi Sarma, and Joshua Vogelstein**, Manifold oblique random forests: Towards closing the gap on convolutional deep networks., **SIAM Journal on Mathematics of Data Science**.

Journal Article (In Progress)

2024 **Adam Li, Amin Jaber, Elias Bareinboim**, Characterization and learning of causal structure from observational and interventional data across multiple environments, In ***Journal of Machine Learning Research***.

2024 **Adam Li, Yushu Pan, Elias Bareinboim**, Generalized causal representational learning in non-markovian causal systems, In ***Journal of Machine Learning Research***.

Journal Articles

2024 Russell A Poldrack, Christopher J Markiewicz, Stefan Appelhoff, Yoni K Ashar, Tibor Auer, Sylvain Baillet, Shashank Bansal, Leandro Beltrachini, Christian G Benar, Giacomo Bertazzoli, et al. The past, present, and future of the brain imaging data structure (bids). *Imaging Neuroscience*, volume 2, pages 1–19. MIT Press One Broadway, 12th Floor, Cambridge, Massachusetts 02142, USA ..., 2024.

2023 Patrick Myers, Kristin Gunnarsdottir, Adam Li, Vlad Razskazovskiy, Dale Wyeth, Edmund Wyeth, Alana Tillery, Kareem Zaghloul, Sara Inati, Jennifer Hopp, et al. Diagnosing epilepsy with normal interictal eeg using dynamic network models. *medRxiv*, pages 2023–08. Cold Spring Harbor Laboratory Press, 2023.

2023 Adam Li, Ronan Perry, Chester Huynh, Tyler M Tomita, Ronak Mehta, Jesus Arroyo, Jesse Patsolic, Ben Falk, Sridevi Sarma, and Joshua Vogelstein. Manifold oblique random forests: Towards closing the gap on convolutional deep networks. *SIAM Journal on Mathematics of Data Science*, volume 5, pages 77–96. SIAM, 2023.

2023 Adam Li, John M Bernabei, Andrew Y Revell, Rachel J Smith, Kristin M Gunnarsdottir, Ian Z Ong, Kathryn A Davis, Nishant Sinha, Sridevi Sarma, and Brian Litt. Quantitative approaches to guide epilepsy surgery from intracranial eeg. *Brain*, volume 146, pages 2248–2258. Oxford University Press US, 2023.

2023 Eric W Bridgeford, Jaewon Chung, Brian Gilbert, Sambit Panda, Adam Li, Cencheng Shen, Alexandra Badea, Brian Caffo, and Joshua T Vogelstein. Learning sources of variability from high-dimensional observational studies. *arXiv preprint arXiv:2307.13868*, 2023.

2022 Adam Li and Chester Huynh. Analysis of neural fragility: Bounding the norm of a rank-one perturbation matrix. *arXiv preprint arXiv:2202.07026*, 2022.

2022 Adam Li, Jacob Feitelberg, Anand Prakash Saini, Richard Höchenberger, and Mathieu Scheltienne. Mne-icalabel: Automatically annotating ica components with iclabel in python. *Journal of Open Source Software*, volume 7, page 4484, 2022.

2022 Kristin M Gunnarsdottir, Adam Li, Rachel J Smith, Joon-Yi Kang, Anna Korzeniewska, Nathan E Crone, Adam G Rouse, Jennifer J Cheng, Michael J Kinsman, Patrick Landazuri, et al. Source-sink connectivity: A novel interictal eeg marker for seizure localization. *Brain*, volume 145, pages 3901–3915. Oxford University Press US, 2022.

2021 Adam Li, Patrick Myers, Nebras Warsi, Kristin M Gunnarsdottir, Sarah Kim, Viktor Jirsa, Ayako Ochi, Hiroshi Otusbo, George M Ibrahim, and Sridevi V Sarma. Neural fragility of the intracranial eeg network decreases after surgical resection of the epileptogenic zone. *medRxiv*, pages 2021–07. Cold Spring Harbor Laboratory Press, 2021.

2021 Adam Li, Chester Huynh, Zachary Fitzgerald, Iahn Cajigas, Damian Brusko, Angel Claudio, Jonathan Jagid, Andres Kanner, Jennifer Hopp, Stephanie Chen, et al. Neural fragility as an eeg marker of the seizure onset zone. *Nature Neuroscience (Featured on the Cover)*, pages 1465–1474. Springer, 2021.

2021 Adam Li et al. *Localizing the Epileptogenic Zone A Dynamical Systems Perspective*. PhD thesis, Johns Hopkins University, 2021.

2021 Patrick Greene, Adam Li, Jorge González-Martínez, and Sridevi V Sarma. Classification of stereo-eeg contacts in white matter vs. gray matter using recorded activity. *Frontiers in neurology*, volume 11, page 605696. Frontiers Media SA, 2021.

2018 Adam Li, Bhaskar Chennuri, Sandya Subramanian, Robert Yaffe, Steve Gliske, William Stacey, Robert Norton, Austin Jordan, Kareem A Zaghloul, Sara K Inati, et al. Using network analysis to localize the epileptogenic zone from invasive eeg recordings in intractable focal epilepsy. *Network Neuroscience*, volume 2, pages 218–240. MIT Press One Rogers Street, Cambridge, MA 02142-1209, USA journals-info ..., 2018.

Conference Proceedings

2024 Adam Li, Yushu Pan, and Elias Bareinboim. Disentangled representation learning in non-markovian causal systems. In *Review NeurIPS 2024; CausalAI Laboratory Technical Report, https://causalai.net/r110.pdf*, 2024.

2023 Adam Li, Amin Jaber, and Elias Bareinboim. Causal discovery from observational and interventional data across multiple environments. In *2023 Neural Information Processing Systems (NeurIPS), CausalAI Laboratory Technical Report, https://causalai.net/r98.pdf*, 2023.

2022 Sophia R Zhai, Daniel Ehrens, Adam Li, Fadi Assaf, Yitzhak Schiller, Sridevi V Sarma, and Rachel June Smith. Temporal and morphological characteristics of high-frequency oscillations in an acute in vivo model of epilepsy. In *2022 44th Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC)*, pages 4896–4899. IEEE, 2022.

2020 Adam* Li, Daniel* Ehrens, Fadi Aeed, Yitzhak Schiller, and Sridevi V Sarma. Network fragility for seizure genesis in an acute in vivo model of epilepsy. In *2020 42nd annual international conference of the IEEE engineering in medicine & biology society (EMBC)*, pages 3695–3698. IEEE, 2020.

2019 Anil Palepu, Adam Li, Zachary Fitzgerald, Katherine Hu, Julia Costacurta, Juan Bulacio, Jorge Martinez-Gonzalez, and Sridevi V Sarma. Evaluating invasive eeg implantations with structural imaging data and functional scalp eeg recordings from epilepsy patients. In *2019 41st Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*, pages 3866–3869. IEEE, 2019.

2019 Adam Li, Zachary Fitzgerald, Jennifer Hopp, Emily Johnson, Nathan Crone, Juan Bulacio, Jorge Martinez-Gonzalez, Sara Inati, Kareem Zaghloul, and Sridevi V Sarma. Virtual cortical stimulation mapping of epilepsy networks to localize the epileptogenic zone. In *2019 41st Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*, pages 2328–2331. IEEE, 2019.

2018 Jennifer J Haagensen, Stephanie Chen, Jennifer L Hopp, Adam Li, and Sridevi Sarma. T101. use of a quantitative algorithm to help predict seizure lateralization in a patient with bitemporal epilepsy and responsive nerve stimulation. *Clinical Neurophysiology*, volume 129, page e41. Elsevier, 2018.

2017 Adam Li, Sara Inati, Kareem Zaghloul, and Sridevi Sarma. Fragility in epileptic networks: the epileptogenic zone. In *2017 American Control Conference (ACC)*, pages 2817–2822. IEEE, 2017.

2017 Adam Li, Kristin M Gunnarsdottir, Sara Inati, Kareem Zaghloul, John Gale, Juan Bulacio, Jorge Martinez-Gonzalez, and Sridevi V Sarma. Linear time-varying model characterizes invasive eeg signals generated from complex epileptic networks. In *2017 39th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*, pages 2802–2805. IEEE, 2017.

2017 Kristin M Gunnarsdottir, Adam Li, Juan Bulacio, Jorge Gonzalez-Martinez, and Sridevi V Sarma. Estimating unmeasured invasive eeg signals using a reduced-order observer. In *2017 39th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*, pages 3216–3219. IEEE, 2017.

Patents

2022 Sridevi Sarma, Adam Li, and Jorge Gonzalez-Martinez. Identifying the epileptogenic zone from nonseizure recordings using network fragility theory, December 13 2022. US Patent 11,523,768.

2022 Adam Li and Sridevi V Sarma. Method and device for localizing epileptogenic zones, August 11 2022. US Patent App. 17/597,211.

2020 Gyorgy Levay, Adam Li, and Nhat Nate Tran. Gear (game enhancing augmented reality): a lower limb alternative control interface for computers, February 6 2020. US Patent App. 16/309,183.

Software

2024 Li, Adam, McCloy, Dan, Larson, Eric, Westner, Britta, Kroner, Alex, Gramfort, Alexandre, Binns, Thomas, and Orabe, Mohammad. mne-connectivity [computer software]. `https://github.com/mne-tools/mne-connectivity`, 2024.

2024 Li, A., Panda, S., and Xu, H. Treeple: Trees for the people. (modern decision-trees compatible with scikit-learn in python). [computer software]. `https://github.com/neurodata/treeple`, 2024.

2024 Adam Li, Jaron Lee, and Aryan Roy. Pywhy-graphs: Causal graphs that are networkx-compliant for the py-why ecosystem., 2024.

2024 Adam Li, Jaron Lee, Francesco Montagna, Chris Trevino, and Robert Ness. Dodiscover: Causal discovery algorithms in python., 2024.

2022 S Appelhoff, AJ Hurst, A Lawrence, Adam Li, YJ Mantilla Ramos, C O'Reilly, L Xiang, and J Dancker. Pyprep: A python implementation of the preprocessing pipeline (prep) for eeg data, 2022.

2020 C Gorgolewski, N Hardcastle, T Hobson-Lowther, D Nishikawa, R Blair, S Appelhoff, et al. Bids-standard/bids-validator: 1. 4. 3 (1.4. 3)[computer software]. *Geneva: Zenodo*, 2020.

2020 S Appelhoff, M Sanderson, TL Brooks, M van Vliet, R Quentin, C Holdgraf, M Chaumon, E Mikulan, K Tavabi, R Höchenberger, et al. Mne-bids: Mne-python+ bids= easy dataset interaction. *Organization for Human Brain Mapping*, 2020.

Industry Experience

Sep. 2022 — Dec. 2022 ***PhD Machine Learning Engineering Intern at Uber***.

Led research & development of a causal machine learning model (applied to 100M+ samples) to dynamically match users with promotional campaigns demonstrating a potential **3-8% increase in profit margins for USA Eats platform.**

Technologies Python, PySpark, SparkMagic Jupyter Notebooks.

Sep. 2018 — Dec. 2021 ***Co-Founder and CTO, Neurologic Solutions Corp.***.

Raised over $600K to-date to fund R&D (Two NSF SBIR Phase I $225k, Maryland Innovation Initiative $150k, $10K JHTV Pitch Competition).

Filed provisional and full patents in the US, European, and Japan markets through collaboration with Johns Hopkins Technology Ventures (JHTV).

Led a team of 3 engineers for **product development** of a software medical-device that helps clinicians localize the epileptogenic zone in epileptic patients (AWS infrastructure with Kubernetes and Flux, REST API, algorithm development, UX design and data engineering).

Led **510k FDA** approval process with a team of 5 engineers, consultants, and advisors involving risk analysis, software requirements, design specifications, and user-testing (unit testing, continuous integration, and software documentation).

Technologies AWS, Kubernetes, Flux, REST API, Python, UX Design, Data Engineering.

Jun. 2012 — Sep. 2015 ***Co-Founder, Biometrics Analytics***.

Researched & developed novel ways to evaluate Parkinson's Disease using biometric sensors and robust data analysis; led team in data acquisition of human data, data analysis, and statistical analysis using MATLAB and Python.

Led data acquisition of clinical data and full-body pose data from the Microsoft Kinect. Performed data analysis using machine learning and image processing algorithms (MATLAB, Python, and C++).

Raised over $20,000 and obtained an IRB for a pilot clinical human study, resulting in the Gordon Fellowship Award for outstanding engineering leadership (awarded to 3 students/year at UCSD). Worked in a team of 4 for the Von Liebig NSF I-Corps Program and the NCIIA Entrepreneurship Program (15% acceptance rate) for startup incubation.

Technologies MATLAB, Python, C++, Microsoft Kinect, Machine Learning, Image Processing.

Research Experience

Jan. 2022 — Present ***Postdoctoral Research Scientist***.

Develop causal discovery algorithms to learn cause-and-effect relationships using observational and experimental data from multiple environments, which can be applied in **non-stationary time-series**, or **multi-modal datasets**.

Develop principled **deep neural networks that represent causal relationships among unobserved contexts** using images, text, audio and more (PyTorch and Multi-GPU training)

Collaborate on developing causal machine learning Python software with Amazon, Microsoft, IBM and academia serving **over 5000 users**.

Technologies Causal AI, PyTorch, Deep Learning, Generative AI Modeling

Aug. 2015 — Dec. 2021 ***PhD Research Scientist, Neuromedical Control Systems Lab***.

Collaborated with clinicians from 5 hospitals nationwide to collect and analyze biomedical data of epilepsy patients, leading to a **Nature Neuroscience publication** and technical document for "how to handle" Brain Imaging Data.

Developed signal processing and statistical methods that resulted in over **400 improvements to open-source packages used by >1000's of developers** (Skills: Git, CI, unit-testing, software design & development)

Spearheaded development of a **statistical model that beat ConvNets by over 20%** in predicting biomedical signals (implemented with Python and Cython and is compatible with scikit-learn).

Technologies Python, Cython, C++, Pandas, MNE

Sep. 2017 — Sep. 2018 ***Visiting Research Scientist, Theoretical Neurosciences Group***.

Designed **nonlinear biophysical simulation models** to predict the dynamics of biomedical signals in the brain.

Developed a **deep learning model trained with simulated-data using nonlinear computational simulations** to perform patient-specific seizure detection (implemented with Pytorch)

Implemented open-source scientific software to simulate noise and analyze biophysical simulations through *The Virtual Brain* (a Human Brain Project)

Technologies PyTorch, Git, Jupyter

Grants - Total $650k

January 1, 2022 — January 1, 2024 NSF Computing Innovation Fellowship Grant (#2127309): Postdoctoral Fellowship (*$150k*). Project: Causal Reinforcement Learning with Unknown Causal Structure: An Application to Treatment of Drug-Resistant Epilepsy Patients. Awarded 69 out of 238 (28% Rate).

May 15, 2021 — April 30, 2022 NSF SBIR Phase-I Grant (#2112011): Co PI (*$256k*). Project: Improving Diagnosis of Epilepsy by Applying Network Analytics to Non-Seizure Scalp EEG Data.

Jan. 2019 — Jan. 2023 Whitaker Phase I Conclusion Grant: Co PI (*$100k*). Project: Outreach for Biomedical Science story-telling around the world. 1 of 5 awardee groups.

2016 — 2021 NSF Graduate Research Fellowship Program (DGE #1746891): (*$138k*). Project: Improving Diagnosis of Epilepsy by Applying Network Analytics to Non-Seizure Scalp EEG Data.

Fellowships & Awards

Research and Academic

2022 ***Schmidt Science Fellowship Finalist***, Post-doctoral Fellowship, Washington, DC.

2020 ***ARCS Chapter Fellowship***, 1 of 3 awardees - Pre-doctoral Fellowship, Washington, DC.

2019 ***Whitaker Conclusion Grant***, 1 of 5 teams awarded $100k - Outreach Fellowship, USA.
2017 ***Chateaubriand STEM Research Fellowship***, Pre-doctoral international fellowship, France.
2017 ***Whitaker Research Fellowship***, Pre-doctoral international fellowship, France.
2017 ***NSF***, Graduate Research Fellowship, USA.
2016 ***NSF***, Graduate Research Fellowship - Honorable Mention, USA.
2016 ***Intel Cornell Cup***, 1st place, USA.
2015 ***NIH NETI***, Graduate training fellowship, Baltimore.
2015 ***Frontiers of Innovation Scholars***, undergraduate research fellowship, UCSD.
2014 ***IDEA Center Scholar***, undergraduate research fellowship, UCSD.
2014 ***Gordon Fellow***, undergraduate leadership award, UCSD.
2014 ***ASAIO Student Design Competition***, top 27 in USA, USA.
2013 ***Amgen Scholar***, undergraduate research fellowship, UCSD.
2013 ***Gordon Leadership Scholar***, undergraduate leadership, UCSD.
2012 ***CalIT Scholar***, undergraduate research fellowship, UCSD.

Entrepreneurial Awards

2022 ***KPCB (Kleiner Perkins VC) Engineering Fellow***.
2021 ***NSF SBIR Phase I Grant***.
2019 ***Maryland Innovative Initiative (MII) Grant***.
2018 ***NSF SBIR Phase I Grant***.
2014 ***NCIIA E-Team Grant***.
2013 ***Health and Life Sciences Grant***.
2013 ***Von Liebig NSF I-Corps Fellow***.

Computer skills

Programming	Python, PyTorch, Numpy/Scipy, Scikit-Learn, R, C, C++
Data Science	Jupyter, Pandas/Polars,
Infrastructure	Docker, Git, NVIDIA GPUs
Database	SQL, MySQL, (Py)Spark

Academic Service

2024 **Reviewer**, *Bioinformatics*.
2023-24 **Reviewer**, *Journal of Machine Learning Research (JMLR)*.
2023 **Reviewer**, *Epilepsia*.
2023 **Reviewer**, *Neural Information Processing Systems (NeurIPS)*.
2023 **Reviewer**, *IEEE Journal on Selected Areas in Information Theory (JSAIT)*.
2022 **Reviewer**, *Uncertainty in Artificial Intelligence Conference Workshop*.
2022 **Reviewer**, *Journal of Open Source Software*.
2022 **Reviewer**, *Network Neuroscience*.
2021-22 **Reviewer**, *NeuroImage*.
2020 **Reviewer**, *IEEE Engineering in Medicine and Biology*.

Teaching Assistantship

Sep. 2019 — Jan 2020 **NeuroData Design Course (BME 580.638) - develop open source contributions to Python scientific computing libraries**, *Teaching Assistant*, Baltimore, MD.

Jan. 2019 — May 2019 **Systems Bioengineering II Course (BME 580.424) - 150 students and 6 TAs**, *Head Teaching Assistant*, Baltimore, MD.

Sep. 2014 — May 2015 **Data Structures Course (CSE 12) - C, C++**, *Teaching Assistant*, La Jolla, CA.

Open Source Software (over 65k stars as a core-developer)

Extensive experience working in asynchronous teams conducting code reviews, developing unit-tested software and writing technical documentation. I contribute high-quality scientific software that impacts thousands of users.

2021 — Present **Core Developer**, *Maintaining Cython, C++ and Python code for decision-tree models.*, scikit-learn | https://github.com/scikit-learn/scikit-learn (57k stars).

2022 — Present **Maintainer**, *Writing software and APIs for learning, estimating and validating causal effects from data.*, PyWhy | https://github.com/py-why (over 5000 stars collectively).

2022 — Present **Maintainer**, *Led scientific and software development of advanced decision tree models in Python and C++.*, Treeple | https://github.com/neurodata/treeple (60 stars).

2023 — Present **Contributor**, *Writing compile-time C++ code for generating efficient kernels for sparse tensor operations*, PyData/Sparse | https://github.com/pydata/sparse (513 stars), Google Summer of Code 2023.

2019 — Present **Core Developer**, *Writing APIs for robustly handling biomedical time-series data*, MNE-Python | https://github.com/mne-tools/mne-python (2600 stars).

2022 — Present **Maintainer**, *Developed automatic noise-rejection models for time-series data*, MNE-ICALabel | https://github.com/mne-tools/mne-icalabel (89 stars).

2021 — Present **Maintainer**, *Led graph-based statistical analysis of time-series and imaging data.*, MNE-Connectivity | https://github.com/mne-tools/mne-connectivity (68 stars), Google Summer of Code 2021.

2019 — Present **Core Contributor Electrophysiology Team**, *Writing technical documentation for handling biomedical neural data*, BIDS | https://github.com/bids-standard/bids-specification (260 stars).

Invited Talks and Presentations

Dec. 2023 **Causal discovery from observational and interventional data across multiple environments**, *NeurIPS, New Orleans, USA*, Adam Li, Amin Jaber, Elias Bareinboim.

Dec. 2023 **Manifold random forests for decoding EEG data and estimating mutual information**, *CMStatistics, Berlin, Germany*, Adam Li, et al., Joshua T. Vogelstein.

Nov. 2022 **Manifold Oblique Random Forests For Decoding EEG Signals Without Feature Engineering**, *Society for Neuroscience, San Diego, USA*, **Adam Li**, Ronan Perry, Chester Huynh, Jong Shin, Soo Kyung S. Kim, Jorge Gonzalez-Martinez, Sridevi V. Sarma and Joshua Vogelstein.

Dec. 2021 **Neural Fragility of the Intracranial EEG Network Decreases Intraoperatively after Surgical Resection of the Epileptogenic Zone in Children with Epilepsy**, *American Epilepsy Society, Chicago, USA*, **Adam Li**, Patrick Myers, Chester Huynh, Nebras Warsi, Kristin M. Gunnarsdottir, Soo Kyung S. Kim, Viktor Jirsa, Sridevi V. Sarma and George M. Ibrahim.

Dec. 2021 **Neural Fragility as an EEG Marker of the Seizure Onset Zone**, *American Epilepsy Society, Chicago, USA*, Patrick Myers, **Adam Li**, C. Huynh, Z. Fitzgerald, I. Cajigas, D. Brusko, J. Jagid, A. Claudio, A. Kanner, J. Hopp, S. Chen, J. Haagensen, E. Johnson, W. Anderson, N. Crone, S. Inati, K. Zaghloul, J. Bulacio, J. Gonzalez-Martinez, S. V. Sarma.

Oct. 2020 **Neural Fragility of Intracranial EEG Networks: Towards an EEG Fingerprint for the Seizure Onset Zone**, *Neuromatch 3.0 Conference, Baltimore, USA*, **Adam Li**, C. Huynh, Z. Fitzgerald, I. Cajigas, D. Brusko, J. Jagid, A. Claudio, A. Kanner, J. Hopp, S. Chen, J. Haagensen, E. Johnson, W. Anderson, N. Crone, S. Inati, K. Zaghloul, J. Bulacio, J. Gonzalez-Martinez, S. V. Sarma.

Jul. 2020 **Automated classification of stereo-EEG contacts in white matter versus gray matter using recorded activity**, *IEEE Engineering in Medicine and Biology, Montreal, Canada (virtual)*, **Adam Li**, Patrick Greene, Jorge Martinez-Gonzalez, Sridevi Sarma.

Jul. 2020 **Towards Automatic Localization and Anatomical Labeling of Intracranial Depth Electrodes in Brain Images**, *IEEE Engineering in Medicine and Biology, Montreal, Canada (virtual)*, **Adam Li**, Chester Huynh, Jorge Martinez-Gonzalez, Sridevi Sarma.

June 23 - July 3, 2020 **Semi-Automatic SEEG Localization and Interactive Neuroimage Visualization in Epilepsy Patients**, *Organization for Human Brain Mapping, Montreal, Canada*, **Adam Li**, Chester Huynh, Christopher Coogan, Sridevi Sarma.

June 23 - July 3, 2020 **MNE-BIDS: MNE-Python + BIDS = easy dataset interaction (Version 1.0.1)**, *Organization for Human Brain Mapping, Montreal, Canada*, Stefan Appelhoff, **Adam Li**, et al. - 10.5281/zenodo.3891836.

Jun. 2020 **Identification of the Epileptogenic Zone from Intracranial Electrocorticography with a Novel Network Fragility Algorithm in Patients with Temporal-Lobe Epilepsy**, *AANS, Virtual*, Iahn Cajigas, Damian Brusko, Angel Claudio, **Adam Li**, Sridevi Sarma, Andres Kanner, Jonathan Jagid.

Nov. 2019 **Application of A Network Fragility Algorithm for the Identification of the Epileptogenic Zone from Intracranial Electrocorticography in Patients with Temporal-Lobe Epilepsy**, *American Epilepsy Society, Baltimore, MD*, **Adam Li**, Iahn Cajigas, Damian Brusko, Angel Claudio, Andres Kanner, Jonathan Jagid, Sridevi Sarma.

Apr. 2019 **Using personalized brain models to augment datasets for deep learning**, *Workshop on Machine Learning and Computer Vision, Janelia, HHMI, USA*, **Adam Li**, Sridevi Sarma, Viktor Jirsa.

Jul. 2018 **Integrating Large Brain Networks and Network Analysis to Understand The Epileptogenic Zone**, *Organization for Computational Neuroscience, Seattle, WA*, **Adam Li**, Marmaduke Woodman, Sridevi Sarma, Viktor Jirsa.

Jul. 2018 **Integrating Large Brain Networks and Network Analysis to Understand The Epileptogenic Zone**, *Advanced Course on Data Science & Machine Learning, Tuscany, Italy*, **Adam Li**, Sridevi Sarma, Viktor Jirsa.

2018 **T101. Use of a quantitative algorithm to help predict seizure lateralization in a patient with bitemporal epilepsy and responsive nerve stimulation**, *Clinical Neurophysiology, Seattle, WA*, Jennifer J. Haagensen, Stephanie Chen, Jennifer L. Hopp, **Adam Li**, Sridevi Sarma.

Aug. 2022 **Robust Causal Discovery**, *Johns Hopkins Neurodata Lab - Lab Meeting, Baltimore, MD*, **Adam Li**, A. Ribeiro, E. Bareinboim.

Sep. 2021 **Neural Fragility as an EEG Marker of the Seizure Onset Zone**, *UCSF Epilepsy Center - Journal Club, San Francisco, CA*, **Adam Li**, C. Huynh, Z. Fitzgerald, I. Cajigas, D. Brusko, J. Jagid, A. Claudio, A. Kanner, J. Hopp, S. Chen, J. Haagensen, E. Johnson, W. Anderson, N. Crone, S. Inati, K. Zaghloul, J. Bulacio, J. Gonzalez-Martinez, S. V. Sarma.