

Girik Malik

CONTACT INFORMATION	Northeastern University College of Computer and Information Sciences 805 Columbus Avenue Boston, MA 02120 USA	+1 (724) 505-2530 girikmalik@gmail.com http://ccs.neu.edu/~gmalik/ https://github.com/gmalik9/
OBJECTIVE	Research internship in Artificial Intelligence in Summer 2020	
CURRENT POSITION	Funded PhD student in Computer Science at Northeastern University, working with Prof. Robert Platt Jr. and Prof. Ennio Mingolla.	
RESEARCH INTERESTS	Neurosciences, Deep Learning, Data Compression, Computer Vision (Recognition, Detection and Classification Problems), Protein Structure Modeling.	
EDUCATION	Northeastern University, Boston, MA, USA Ph.D. in Computer Science (2018 - Present) Focus Areas: AI, Machine Learning, Robotics, Neurosciences, Computer Vision Advisors: Robert Platt Jr., Ennio Mingolla Shiv Nadar University, India Bachelors of Technology in Computer Science, 2017 Minor in Big Data and Analytics GPA: 8.51/10. 100% Tuition Scholarship. Top 5 in class of 120. Thesis: "Development of a Neonatal Tactile Connectome using Graph Theory for the Prediction of Neurobehavioural Adaptation in Early Childhood" Done by only 2% of undergraduate students. The Ohio State University, Columbus, OH, USA Visiting Research Scholar Summer 2015, Summer 2016, Spring 2017	
PATENTS	Secure multi-level electronic authentication techniques Malik G., Malik G. <i>Submitted:</i> Jun 29, 2017 Method of Data Compression and Decompression Malik G., Dhar P.K. <i>Submitted:</i> Jul 8, 2016 A Biomolecule based Data Storage System Malik G., Dhar P.K. <i>Submitted:</i> Oct 16, 2015	201711022812 (India) PCT/IB2016/054294 PCT/IB2015/057964
SELECTED PUBLICATIONS AND CONFERENCE ABSTRACTS (PEER REVIEWED)	Malik, G., et al. (2019), Deciphering general characteristics of residues constituting allosteric communication paths. <i>International Work-Conference on Bioinformatics and Biomedical Engineering</i> , pp. 245-258, Springer, Cham, 2019. Ijaq J., Malik G., et al. (2019), A Model to Predict the Function of Hypothetical Proteins through Nine Point Classification Scoring Schema. <i>BMC Bioinformatics</i> , 20(1), p.14. Sundararajan, V. S., Malik, G., et al. (2018), HYPO: A Database of Human Hypothetical Proteins. <i>Protein and peptide letters</i> , 25(8), 799-803. Kumar, A., Pandeya, A., Malik, G., et al. (2018), A web resource for nutrient use efficiency-related genes, quantitative trait loci and microRNAs in important cereals and model plants. <i>F1000Research</i> , 7. Malik, G., Kloczkowski, A. (2018). Classification of Allostery in Proteins: A Deep Learning Approach. <i>Biophysical Journal</i> , 114, 3, 422a. Kouza, M., Malik, G., Buhimschi, I., Faraggi, E., Kloczkowski, A. (2018). Combining Prediction of Protein Aggregation Propensities with Prediction of Other One-Dimensional	

Properties. *Biophysical Journal*, 114, 3, 432a.
 Malik, G., Banerji, A., Kouza, M., Buhimschi, I., Kloczkowski, A. (2017). A Deep Learning approach for the prediction of residues constituted in the Allosteric Communication Paths. *Protein Science*, Vol. 26, 25-26.
 Kouza, M., Malik, G., Faraggi, E., Kolinski, A., Buhimschi, I., Kloczkowski, A. (2017), Prediction of Protein Aggregation Propensities using GOR Method. *Biophysical Journal*, 112, 3, 198a - 199a.

BOOK	Malik G., Shankar S., Bhandari S. (2014), An Enchanting Trail through Wilderness, Insights into the Web of Life. ISBN: 1320132715, <i>Blurb Inc.</i> , San Francisco, CA. https://www.amazon.com/Enchanting-Trail-through-Wilderness/dp/1320173446/
PROFESSIONAL EXPERIENCE	<p>Bosch Center for Artificial Intelligence Apr 2019-Aug 2019 Artificial Intelligence Intern <i>Development of identity anonymisation with information preservation system using GANs</i></p> <p>The Ohio State University, College of Medicine Sep 2017-Mar 2018 Visiting Research Scholar, Battelle Center for Mathematical Medicine <i>Identification of early biomarkers for Pre-Eclampsia using unsupervised learning methods</i></p> <p>Labrynthe Pvt. Ltd. http://labrynthe.com/ Apr 2016-Present CoFounder and Chief of Technology <i>R&D and education startup for astronomy for school children. 1500+ students in 20+ schools. Already Profitable</i></p> <p>BrainWeave Aug 2014-Jul 2015 Founder and CEO <i>Data Analytics startup, aimed at improvement of schools</i></p> <p>Shiv Nadar Foundation Summer 2014 Intern, Software Development <i>Developed Hostel Management System using Zend Framework</i></p> <p>FreezePix Aug 2013-Jul 2014 Founder and CEO <i>An intra university image sharing social network</i></p>
SELECTED HONORS AND AWARDS	<p>2018 Travel Award - Education Committee Travel Award. <i>62nd Annual Meeting of The Biophysical Society, San Francisco, CA, USA.</i></p> <p>2017 Invited Talk - Prediction of Protein Aggregation Propensities: A Deep Learning Approach. <i>31st Annual Symposium of The Protein Society, Montréal, Québec, Canada.</i></p> <p>2017 Travel Award - Finn Wold and Protein Science Travel Award. <i>31st Annual Symposium of The Protein Society, Montréal, Québec, Canada.</i></p> <p>2017 NSF sponsored Fellowship - for Conference Attendance. <i>From Computational Biophysics to Systems Biology (CBSB 2017), Cincinnati, OH, USA.</i></p> <p>2016 Invited Talk - Novel Technique for Conversion of Digital Data into DNA Sequence. <i>Bioinformatics Center at Birla Institute of Scientific Research, Jaipur, Rajasthan, India.</i></p>
LANGUAGES	English (<i>fluent</i>), Hindi (<i>native/bilingual</i>), Punjabi (<i>native/bilingual</i>), Bengali (<i>beginner</i>)
PROGRAMMING SKILLS	<p>Proficient: C, C++, Python (including PyTorch, Tensorflow and OpenCV), PHP, SQL, HTML, CSS, Javascript, JQuery, AJAX, L^AT_EX</p> <p>Familiar: MATLAB, Mathematica, Java</p>