

Nishant Jana



PERSONAL INFORMATION	
E-MAIL	nishantjana5@gmail.com
GITHUB	@invisilico
CONTACT NUMBER	+91 99204 31714
CITIZENSHIP	Indian
DATE OF BIRTH	25th of November, 1999
PERMANENT ADDRESS (INDIAN)	M – 803 Bakeri Swara Near ABB Campus Makarpura Maneja Road Maneja, Vadodara 390013, India
RESEARCH EXPERIENCE	
POSITION	Collaborator, (July 2020 – Present)
SUPERVISOR	Dr. Horacio de la Iglesia, Dept. of Biology, University of Washington, Seattle.
AREA OF RESEARCH	Digital Rhythms Project; Rhythms in Human Behaviour: Sleep and Work
POSITION	Visiting Student, (Dec 2019)
SUPERVISOR	Dr. Sheeba Vasu Chronobiology and Behavioural Neurogenetics Lab, JNCASR, Bangalore
AREA OF RESEARCH	Circadian rhythms in redox state of pacemaker neurons [proposed project]
POSITION	Student Researcher, (May 2019 – May 2021)
SUPERVISOR	Dr. S. Sahabudeen Dept. of Biotechnology, SBE, SRM IST, Chennai, India
AREA OF RESEARCH	1. Phenotypic differences in fly behaviour with toxin exposure 2. Fruit fly model of Tauopathies (Transgenic Alzheimer's model) 3. Variance of exposure level of toxins in vial raised populations of flies https://github.com/invisilico/interesting_experiments/blob/main/README.md
WORK EXPERIENCE	
POSITION	Teaching Assistant, (July 2021)
COMPANY	Neuromatch Academy Inc., [Computational Neuroscience Summer School]
EDUCATION	
PRESENTLY PURSUED DEGREE	Bachelor's in Technology, Biotechnology (2017 – 2021), (79.25%)
INSTITUTION	SRM Institute of Science and Technology
SR. SECONDARY SCHOOL	All India Senior School Certificate Examination (2017)(77%)
SECONDARY SCHOOL	All India Secondary School Examination (CBSE) (2015)(9.6 CGPA)
INSTITUTION	R. N. Podar School, Affiliated to CBSE, Mumbai, India

SUMMER SCHOOLS	
AUGUST 2021	NeuromatchAcademy: Deep Learning [Interactive]
MAY - AUGUST 2020	SRBR Chronoschool 2020
HIGHLIGHTS	Made my own tool to study Android App timestamps Joined the Digital Rhythms Project, with the de la Iglesia lab Made tutorial notebooks to aid teaching neurobehaviour experiments
JULY 2020	NeuromatchAcademy: Computational Neuroscience [Interactive]
HIGHLIGHTS	Worked with Dr. Steinmetz's Neuropixel data from 2AFC task "Why do task engaged mice fail sometimes?"
CONFERENCES ATTENDED	
JANUARY 2020	5 th Asia Pacific Drosophila Research Conference (APDRC'5), Pune
POSTER PRESENTED	"Comprehensive study on the Bisphenol-A induced <i>Drosophila</i> model for Autism Spectrum Disorders with co-treatment by Cerium oxide Nanoparticles and U0126 MAP Kinase inhibitor: genotoxicity, oxidative stress, apoptosis and behavioural irregularities."
FEBRUARY 2019	Accelerating Biology, 2019 (BRAAF – CDAC), IISER-Pune
POSTER PRESENTED	"Computing machinery and evolutionary survival"
(ONLINE) OCTOBER 2020	Neuromatch 3.0
(ONLINE) JULY 2020	Society for Developmental Biology, 79th Annual Meeting
(ONLINE) MAY 2020	Neuromatch 2.0
	Neurizons2020 (9th, Biennial)
(ONLINE) MARCH 2020	Neuromatch Unconference
PUBLICATIONS	
2021	Role of cerium oxide nanoparticles in decreasing oxidative stress and developmental delays in <i>Drosophila melanogaster</i> as an in-vivo model for Bisphenol-A toxicity. A. Sarkar, <i>et al.</i> , <i>Chemosphere</i> 284 , 131363 10.1016/j.chemosphere.2021.131363
ONGOING PROJECTS	
WITH DE LA IGLESIA LAB, UW	1. Digital Rhythms Project – Actively Collecting Data https://delaiglesialab.github.io/DigitalRhythmsProject/ 2. Tutorial notebooks – Made freely available to professors for use https://invisilico.github.io/Tutorial-Notebooks/
BY SELF	1. Mapping clock informed navigation circuitry in <i>fruit flies</i> Analysing the <i>Janelia</i> fly hemibrain EM data to model connections between pacemaker neurons and central complex/EPG neurons

COMPUTER/HARDWARE RELATED SKILLS	
PROGRAMMING LANGUAGES	Python3/2.7, MATLAB and R
RELEVANT SOFTWARE	Worked with C-Trax, JAABA and familiar with APT, DeepLabCut Attended Neurodata Without Borders orientation for effective code sharing
FAB SKILLS	Built custom fly tracking arenas using 3D printing and Laser cutting
HARDWARE	Constructed an integrated fly tracking set-up using an old laptop: Using back of faulty LCD panel for perfectly diffused light source and a functional screen for closed loop experiments using psychobox and some custom code on a linux system.
OTHER NOTABLE INFORMATION	User-developer of TOPAS-MC and nBio, A Monte-Carlo Simulation toolkit for biological molecules based on Geant4 Particle data.
ONLINE COURSES	
COMPUTATIONAL NEUROSCIENCE	Computational Neuroscience – University of Washington, Seattle, Coursera Medical Neuroscience – Duke University, Coursera (ongoing)
NEUROSCIENCE	Visual Perception and the Brain – Duke University, Coursera
CHRONOBIOLOGY	Circadian Rhythms: How Rhythms Structure Life – LMU Munich, Coursera
PYTHON, GITHUB, JUPYTER	Applied Plotting, Charting & Data Representation in Python - UM, Coursera Introduction to Data Science in Python – University of Michigan, Coursera Google IT Automation with Python (5 part+project) – Google, Coursera
MATLAB	Introduction to Programming in MATLAB – Vanderbilt University, Coursera Practical Data Science with MATLAB – Mathworks, Coursera
STATISTICS AND EXPERIMENTAL DESIGN	Statistics with R (5 part + Project) – Duke University, Coursera Inferential Statistical Analysis with Python – University of Michigan, Coursera Bayesian Statistics: From concept to data analysis - UC Santa cruz, Coursera Experimentation for Improvement – McMaster University, Coursera
GAME THEORY	Welcome to Game Theory – University of Tokyo, Coursera Game Theory with Python – Coursera Project Network, Coursera
THEORY OF COMPUTATION	Computer Science: Algorithms, Theory and Machines - Princeton, Coursera
COMPUTER VISION	AWS computer vision: Getting started with GluonCV - AWS, Coursera Computer Vision Basics – SUNY, UB, Coursera
COMMUNICATION SKILLS	
LANGUAGES	English (Most used and proficient in, All formal education in English) Hindi, Bengali (Fluency in speech, some reading and writing)