

Gurjot S. Sidhu

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gsidhu.github.io

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██████████ Zürich, CH

Education

M.Sc. Physics, ETH Zürich, 2015 - 2018
B.Sc. Physics (Honours), Hansraj College, University of Delhi, 2012 - 2015
Std. XII, AISSCE (C.B.S.E.), DAV Public School, 1997 - 2012

Research Interests

Computational Social Science, Data-driven Modeling, Modeling Dynamic Systems

Research Experience

Student Researcher May 2016 - Jun 2016
ETH Zürich, Zürich
Created an agent-based model for the life-cycle of collaboration networks in a 6-week semester project
Skills acquired: Simulating agent-based models

Research Intern Jun 2015 - Aug 2015
Okinawa Institute of Science and Technology, Japan
Studied the vortex dynamics of a Bose-Einstein condensate trapped in a harmonic potential particularly for phase windings larger than unity
Skills acquired: Simulating Quantum Systems, Working on a HPC

Research Assistant Nov 2013 - Feb 2015
Hansraj College, University of Delhi
Studied real life applications of differential equations and their physical and geometrical aspects, using physical experiments and computer simulations
Skills acquired: Simulations (2D and 3D) and scientific programming in Python

Summer Research Intern Jun 2013 - Jul 2013
Department of Physics and Astrophysics, University of Delhi
Studied the change in physical, chemical and ferromagnetic properties of Barium-Titanate thin films when doped with transition metal elements
Skills acquired: Preparing thin films using chemical methods

Work Experience

Tutorat Oct 2015 - to date
ISEK, University of Zürich, Zürich
Working as a research assistant with Prof Johannes Quack, helping translate and interpret texts in Hindi
Skills acquired: Interpreting interviews from a social anthropological perspective

Technical Skills

Languages
Scripting: Python, MATLAB, R, C++
Web Development: HTML, CSS
Documenting: LaTeX, Microsoft Office

Tools

Version Control: Git and SVN
Other: Linux, HPC on supercomputer clusters

Achievements and Honors	High School Valedictorian Academic Merit Award, Std. XII, DAV Public School Merit Certificate, CBSE - (scored 100% in Mathematics, AISSCE)	
Co-curricular Activities	Freelancer Interned with Hindustan Times Education - India's leading national daily Assisted in creating the curriculum for an ESL course Technology blogger	Jul 2013 - 2014
	Open Mike's Comedy Nights Stand-up comedian Founding member of Zürich's first open mic stand-up comedy event Perform monthly events at The International Beer Bar, Zürich	Nov 2015 - to date
	Blueprint Masquerades Actor, Assistant Director Assisting the director for the Spring 2017 production Staged Shakespeare's "The Tempest" to a public audience at the Zürich Shakespeare Festival 2016	Oct 2015 - to date
	Hansraj Dramatics Society Technical Head, Co-director Member of four productions (stage and street) that won numerous competitions at the inter-university level In-charge of all PR and technical activities	Aug 2012 - April 2015
	LUMEN - Physics and Electronics Society Academic Coordinator, General Secretary Set up the Schrodinger's Club - Weekly Journal Club of the Department of Physics, Hansraj College Organised debates, quizzes, seminars and offered general assistance	Aug 2013 - April 2015
Hobbies	Theatre, Stand-up comedy, Running, Reading, Football, Amateur Software Development	
References	<ol style="list-style-type: none"> 1. Dr. Johannes Quack, Assistant Professor ISEK, University of Zürich <i>johannes.quack@uzh.ch</i> 2. Dr. Chetana Jain, Assistant Professor Hansraj College, University of Delhi <i>chetanajain11@gmail.com</i> 3. Dr. Dr. Frank Schweitzer, Professor Chair of Systems Design, ETH Zürich <i>fschweitzer@ethz.ch</i> 	