Gurjot S. Sidhu

gurjots sidhu@gmail.comgsidhu.github.io +41 76 819 2771

EG Ost Bachlerstrasse 44 8046 Zurich, CH

Education

M.Sc. Physics, ETH Zurich, 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

Systems Design, Modeling Dynamics, Computational Physics

Research

Research Intern

June 2015 -Aug 2015

Experience 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 using MATLAB, HPC using

SLURM workload manager

Research Assistant

Nov 2013 -

Hansraj College, University of Delhi

Feb 2015 Studying the real life applications of differential equations and under-

standing their physical and geometrical aspects, using physical

experiments and computer simulations

Skills acquired: Simulations (2D and 3D), 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 2016 -

to date

ISEK, University of Zurich, Zurich 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

Freelance

Interned with Hindustan Times Education

Technical Skills

Languages

Python, MATLAB, LaTeX, C++, HTML, CSS

Modeling Infectious Disease Dynamics, Agent Based Modeling of Social Systems

High Performance Computing

SLURM job scheduler on Sango cluster

Achievements and Honors

High School Valedictorian

Academic Merit Award, Std. XII, DAV Public School

Merit Certificate, CBSE - (scored 100% in Mathematics, AISSCE)

Laureate Certificate, DAVCMC - (scored 100% in Mathematics, AISSCE)

86th percentile globally in Google Code Jam 2014

Semi-finalist (Parliamentary Debate) at Shri Ram Debating Festival 2015 Gold Medal (State Rank 1), International Olympiad of English Language

Best Actor, One Act Play Festival, Takshila Education Society Gold Medal, Mahatama Hansraj Sports Tournament (Basketball)

Silver Medal, District Level School Games (Basketball)

Blueprint Masquerades

Oct 2016 -

Lights and Sounds Assistant

to date

Staged Shakespeare's "The Tempest" to a public audience

Hansraj Dramatics Society

Aug 2012 -

Technical Head

April 2015

Was a part of four productions - won numerous competitions at the inter-university level; co-directed a street play

In-charge of all PR and technical activities

LUMEN - Physics and Electronics Society

Aug 2013 -

Academic Coordinator, General Secretary

April 2015

Set up the Schrodinger's Club - Weekly Journal Club of the Department

of Physics, Hansraj College

Organised debates, quizzes, seminars and offered general assistance

Hobbies

Theatre, Stand-up comedy, Reading, Football, Amateur Software Development