Surendra Kumar Verma DOB: 12<sup>th</sup> Sep 1987 Address: D-207, R P Hall Ph: 9333855268 Email: skverma.iitkgp@gmail.com ACADEMIC QUALIFICATIONS Year Degree/Certificate Board/Dept. Institute / School CGPA/% 2011 BTech + MTech (Dual Degree) **E&ECE-VIPES** IIT Kharagpur 7.19 2004 Class XII **UP State Board** SHIC, Sitapur 73.0 2002 Class X UP State Board SHIC, Sitapur 79.5 **CONFERENCE PAPERS Title** Conference **Status** Optical Wavelength Demultiplexer based on Photonic Crystal Architecture Photonics '10, IIT Guwahati Selected An Improved Method for Uniform Etching of An Intermediate Fiber Clad Section Optical Fiber Comm. USA Submitted SCHOLASTIC ACHIEVEMENTS State Rank 27 out of more than 20,00,000 examinees in Class X Among top 1.8 % students out of more than 1,00,000 examinees in the GATE '10 Merit Scholarship in appreciation of the performance in Class X, awarded by UP Government ACADEMIC PROJECTS

# M. Tech Project

- Growth of Semiconductor Nano-Wires on a uniformly cladding removed optical fiber '10-11
  - Devised a **new methodology** for uniform etching of fiber cladding
  - Reached an initial stage of semiconductor growth on the exposed core of fiber
- **B.** Tech Project
- Design of Optical Wavelength Demultiplexer based on Photonic Crystal Architecture '09-10
  - To design a wavelength splitter to separate three different wavelength signals
  - Proposed a design with low cross-talk and high transmitivitty

## **Term Projects**

- Design and Implementation of Facial Identification system using Eigenfaces
  - Facial identification of different people using their images as training database.
  - Achieved 89% efficiency for tested images for different expressions and light conditions
- Design and Implementation of a Voltage Reference with adjustable output voltage levels
  - To design the voltage reference for an electronic circuit for a variable voltage range
  - The implemented hardware had stable output voltage for a output voltage range of 0-12 volts

#### **INTERNSHIPS**

#### CRIS New Delhi

- Deployment of wireless LAN at a workplace and mitigating the Security risks
  - The research will further be used by the company for implementing wireless LAN
- Comparison of TDMoIP and VoIP

#### **Omega Electronics** Jaipur

- Project Head of team comprising 20 trainees in Fabrication and Quality Control Department '08
  - Project resulted in 25% decrease in lead time

#### INNOVATION / CREATIVITY / INITIATIVE

- Created IIT's first Face Detectable 294 sq feet completely pixelated Rangoli '09
- Created IIT's first Image Changeable 422 sq feet completely pixelated Rangoli '10 https://sites.google.com/site/rangoliskverma/
- Started an Institute level annual fine arts competition "Sfumato" '07

### POSITIONS OF RESPOSIBILITY

- Convener, Executive Governor, Executive Head, SPECTRA-The fine-arts group, IIT KGP '08-11
  - Took an initiative to bring all the fine arts events of SF under the single umbrella of Spectra
  - Organized more than 20 workshops, competitions and exhibitions
- **Design Team Head**, Inter-hall Illumination and Rangoli '08-10
  - Gold in Rangoli for the first time in the **History of 15 years, Silver** this year '09'10
  - **Gold** in Illumination '07 and'10
- Sets captain, Dramatics and Choreography
- **Member, Fine Arts and Modeling Team** 
  - Silver, Inter Hall Thermocol and Clay Modeling '09-10
- Fine arts and Modeling Secretary '07-08
- Member, Dramatics team
  - Gold ('07) and Bronze ('08) in Open IIT
- Family Head, Destination Artland, Spring Fest '09-10
- Student Representative, Training and Placement, Dept. of E & ECE '09-10
- Family Sub-Head, Eureka Kshitij '08

#### EXTRA CURRICULAR ACHIVEMENTS

- Student of Padmashree Ustad Rashid Khan in Hindustani Classical Vocal Music Since Jan'10
- Made an instrumental music video, telecasted on Tara Music Channel '10
- Player of six musical instruments (Indian classical and popular music)
- **Silver** in **District Level** solo singing competition
- **Bronze** in **District Level** Rangoli competition '98
- Pencil sketch got selected for the **State Level** exhibition '04
- Awarded the **Most Active Fresher** among the batch of 120 students '07-08