Yagyaansh Khaneja
B.Tech. (Engineering Physics)
Contact No: +91-99x011x913
Email: contact@yagyaansh.com

Indian Institute of Technology Roorkee

Education

Year	Degree/Examination	Institution/Board	CGPA/Percentage
2021	B.Tech. (Engineering Physics)	Indian Institute of Technology, Roorkee	7.113 (First Division)
2017	Intermediate (Class XII)	Rukmini Devi Public School (CBSE Board)	94.20%
2015	Matriculate (Class X)	Rukmini Devi Public School (CBSE Board)	10.00 CGPA

Experience

Project Manager (Volunteer) at Omniverse | Tarayana Foundation, Bhutan　　Dec 2024 – Present
- Guiding the development of tech ecosystem (mobile app, dashboard, AI model) for Smart Omni Villages.
- Lead Manager for the conference – Manthan (Under the Royal Patronage of Her Majesty the Queen Mother Ashi Dorji Wangmo Wangchuk La)

Head of Innovation | Divos Hardware (Family Business), Delhi　　Sept 2022 - Present
- Collating Sales data to potentially apply ML models in predicting sales & demand
- Self-Designed a catalog of items, from scratch, increasing ease-of-doing business!
- Building an online store, to carefully catalog and standardize 1000+ products. (also selling on Meesho)
- On-boarded accounts on cloud, increasing speed of operations; **2x the revenue to 1 million USD** (in less than a year).
- Building solutions for effective accounting in logistics (trading goods)
- Introduced **unique** classification system for hardware items, improving logistic management.

Research & Site Intern | Himalayan Institute of Alternatives, Ladakh (SONAM WANGCHUK)　　Jan 2022 - May 2022
- Drafted a construction training manual for Passive Solar Heated Buildings.
- Monitored weather data using Campbell Scientific weather station installed at various locations in Ladakh.
- Helped in the installation of LiFi system (for high speed internet access to remote villages cheaply).
- Maintained the battery house of a 20kW solar PV system.
- Set up the panels, batteries and inverter for a new 7.5 kW solar PV system at HIAL Campus.
- Assisted in the design & installation of a new Stevenson Screen made on site.

Research Summer Camp (Photonics) | ITMO University, St. Petersburg, Russia　　May 2019 – June 2019
- Worked on "THz generation from laser filamentation in different liquids".
- Studied Quantum Information, Holography, Security of QKD systems, femtosecond lasers.
- Simulated interference and diffraction pattern for different waveforms and apertures.

Volunteering

Science/Maths/English Teacher | Hanoi, Vietnam　　July 2022 – Aug 2022
- Volunteered in the sub-urbs of Hanoi, Vietnam as a teacher. (Workaway)

Science/Maths/English Teacher | SECMOL, Ladakh　　May 2022 – July 2022
- Volunteered in an alternate school, prepared dropouts to pass 10th examination.
- Taught **Science** and **Maths** using fun and practical experiments.
- Took hobby classes in **photography** and **astronomy** for interested students.

Projects

Personal Website | Self　　Oct 2021 – Nov 2021
- Hard Coded my website yagyaansh.com using basic HTML, CSS and JavaScript.
- Hosted the static website on GitHub.

B. Tech Project | IIT Roorkee　　Aug 2020 – Sept 2021
- Design & Simulation of photonic switch based on GST embedded SOI rib waveguides (1 THz) (CST MW Studio & COMSOL).
- Designed a Non-volatile on-off photonic switch (high static performance) based on GST embedded SOI channel waveguide for operation at 2.1um. (CST MW Studio).　　Dec 2018 – June 2020
- Studied **Phased Array Waveguides & WDM** for applications in data communication.

Skills

Computer Languages	FORTRAN, Python, HTML5, CSS3, JavaScript, SQLite, LaTeX
Software Skills	MS Office, MATLAB, Lightroom, CST MW Studio, COMSOL
Languages Known	English (SRW - Native), Hindi (SRW - Native), French (SRW - Novice), Punjabi (S - Novice)

S – Speaking, R – Reading, W - Writing

Certified Courses	Machine Learning by Andrew NG (Certificate), Web Design for Everybody: Specialization (Certificate), Internet: History, technology & Security (Certificate), Python for Everybody: Specialization (Certificate)

Achievements

- Centre Top 10% in part A of National Graduate Physics Examination (NGPE), 2019.
- AIR 2933 in JEE (Mains) 2017 Paper-1 (Engineering) [Top 0.2%]
- AIR 618 in JEE (Mains) 2017 Paper-2 (Architecture)
- AIR 3188 in JEE (Advanced) 2017 [Top 2.1%]
- Invited in National Science Camp (VIJYOSHI) 2016, by KVPY, the INSPIRE Program, DST and IISER Kolkata.
- AIR 300 in KVPY (Kishore Vaigyanik Protsahan Yojana) - 2015 in SA (class XI) General category.
- Awarded scholarship for excellence in NTSE **(National Talent Search Examination)** 2015. [Top 0.1%]
- Letter of Appreciation by Smriti Irani (**HRD Minister**, Govt. of India, 2015) for exceptional performance in CBSE Examination, 2015.
- Rank 7 in Science Open Merit Test (SOMT) - 2015 conducted by Delhi Science Teachers' Forum.
- AIR 578 Rank in National Level Science Talent Search Examination (NSTSE), 2015.
- AIR 190 in FIITJEE Talent Reward Exam (FTRE), 2014.
- Rank 10 in Junior Science Talent Search Examination (JSTSE) 2013-14 conducted by Science Branch of DoE, Govt. of NCT Delhi.

Extras

Additional Secretary | Photography Section, IIT Roorkee   Dec 2018 – May 2021

Coordinator | Thomso – Cultural Fest, IIT Roorkee   Oct 2019

Content Manager & Events Executive Member | Srishti – Technical Exhibition, IIT Roorkee   Jan 2019 - Mar 2019

Volunteer | National Social Service (NSS), IIT Roorkee   July 2017 – May 2018

National French Spell Bee | Le Frehindi   Dec 2014
- Cleared Stage 1 & participated in Stage 2 of the Concours d'Orthographe 2014 (Advance level).

French Olympiad (National Level) | French Embassy in India   Dec 2013
- Awarded a medal by the Embassy of France in India for being one of the top 3 rankers in my school.

Courses

Coursework | IIT Roorkee   B. Tech 2017 - 2021
- Applied Optics (PHN-212)
- Semiconductor Devices (PHN-312)
- Engineering Analysis & Design (PHN-205)

Electives | IIT Roorkee   B. Tech 2017 - 2021
- Optical Communication Systems (PHN-731)
- Fiber and Non-Linear Optics (PHN-608)
- Innovation, Entrepreneurship and Business Models (IBM-308)
- Optoelectronics (PHN-427)
- Photonic Sensors (PHN-735)
- Semiconductor Microelectronic Technology (PHN-724)