Curriculum Vitae of Shashank Agrawal, born on 11thDec 1986

Current Address: No - 22/247, Shastri Nagar, Amahiya, Rewa - 486001, Madhya Pradesh, Bharat
Email: shash7.shashank@gmail.com, **Phone:**+91-9738038263, **Nationality:** Indian, **Languages:**
English, Hindi, Sanskrit

SUBJECTS THAT I CAN TEACH

Physics
Mathematics
Entrepreneurship & Leadership Development
Communication Skills
Programming Using Python

PROFESSIONAL EXPERIENCE

Mentor of Team VillageBrand, Winner in PitchFest competition, organised by Moonshot Jr under their
Entrepreneurship & Leadership Development Program (ELDP)   **Aug 2021 - Jan 2022**
https://www.youtube.com/watch?v=cxuZCTZt3Kc

Engineer & Developer at SYmbosim Simulations Private Limited   **Nov 2017 - May 2018**

Doctoral Level Researcher at Nonlinear Multifunctional Composites - Analysis & Design (NMCAD)
Lab, Aerospace Department, Indian Institute of Science Bangalore, Karnataka under Prof. Dineshkumar
Harursampath   **Aug 2011 - Oct 2016**

- **Title of the Project:** "Piezo-Composite Flapping Wing as Integral Structure & Actuator"
- **Skills developed:** State of the art - Variational Asymptotic Method, Calculus of Variations, Finite
  Element Modeling for Nonlinear Problems, Advanced programming in Python,
- **Mentorship:** Mentored more than 30 intern students on various peripheral works of the project.

Assistant Professor at Aerospace Engineering Department, Amrita University, Coimbatore, Tamilnadu
(TN), India   **Aug 2010 - Jul 2011**

- **Courses Taught:** Aeroelasticity, Finite Element Method and Flight Dynamics & Control for 3rd year
  & 4th year aerospace undergraduate students
- **Labs Conducted:** Structures Lab, Vibration Lab for 2nd year & 3rd year aerospace undergraduate
  students

EDUCATIONAL BACKGROUND

Graduation & Post Graduation
- **MA in Sanskrit (Navya-Vyakaran)**
  Central Sanskrit University, Bhopal, India through Distance Education Programe, Mukta Swadhyaya
  Peetham   **Oct 2018 - Jan 2021**
- **B. Tech & M. Tech (Aerospace Structures)**
  Aerospace Department, Indian Institute of Technology Bombay, IIT Bombay under 5-year Dual Degree
  Programme   **Aug 2005 - Jul 2010**

- **Courses Studied**
  - **at IISc Bengaluru**   **Aug 2011 - Oct 2016**
    Variational Asymptotic Method, Mechatronics, Space Flight Mechanics
  - **online courses**   **Aug 2005 - Oct 2016**
    Advanced Finite Element Method, Continuum Mechanics, Functional Minimisation, Introduction to Computer Science & Programming, Autonomous Navigation for Flying Robots, Tensor Analysis & Manifolds
  - **at IIT Bombay**   **Aug 2005 - Aug 2010**
    Aeroelasticity, Fiber- Reinforced Composites, Finite Element Method, Elastic Plate Theory, Vibrations & Structural Dynamics, Measurement & Instrumentation Techniques, Engineering Design, Aircraft Design & Optimisation

COMPUTER SKILLS (P: PROFICIENT, I: INTERMEDIATE, E: ELEMENTARY)

Programming: Python (**P**), Matlab (**E**), Mathematica (**P**), Fortran (**I**)
Computational Softwares: ANSYS (**I**), Variational Asymptotic Beam Sectional (VABS) Analysis (**P**), Geometrically Exact Beam Theory (GEBT) Analysis (**P**), Variational Asymptotic Method for Unit Cell Homogenization (VAMUCH) (**P**), PreVABS (**P**), PostGEBT (**P**), PyFEM (**I**), Finite Element Analysis Program, FEAP(**P**), ABAQUS (**E**)

COMPETITIONS & CREDENTIALS

1. **Winner as the team MultiFun**, comprising of 5 IISc students (including alumni), in the International Competition **Airbus-UNESCO - Fly your ideas - 2015** for project on "A Hybrid Battery Piezoelectric Composite for Next Generation Aircraft", competing with **518 teams** from **104 countries** across the globe and grabbing a prize money of **30,000 €**   **Jan 2015 - May 2015**

2. **Winner as the team Lakshya**, comprising of 13 IISc students in an International **Student Design Competition (SDC)** under **Best Entrant Graduate Category**, organised by **American Helicopter Society (AHS)**, sponsored by **Boeing Company** on the topic "Distributed Logistics in an Urban Setting Using Small Unmanned Aerial Vehicles"   **Feb 2015 - May 2015**

3. **All India Rank (AIR) 1487** in Joint Entrance Examination (IIT JEE). Among top 0.5% of 3.5 lakh students appeared in the year of the examination   **May 2005**

4. **All India Rank (AIR) 8032** in All India Engineering Entrance Examination (AIEEE). Among top 1.6% of 5.2 lakh students appeared in the year of the examination   **Apr 2005**