

ROHITH KMS

SCIENCE COMMUNICATOR & JR. SIMULATIONS ENGINEER

PROFESSIONAL PROFILE

I am passionate about communicating the joy and wonder of science to audiences of all ages and backgrounds. I am particularly interested in leveraging technology to create tools to advance the understanding of science. I have a strong background in programming, and experience in web development and writing articles that explain cutting edge research to a lay audience. I also have experience teaching Physics for grades 9-12.

CONTACT

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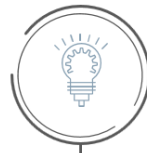
CAREER HISTORY



2021 - 2021

ESL Editor
Cactus Communications

- Academic Journals
- Manuscript Editing
- Proofreading
- Formatting



2022 - 2022

Sci. Communication Intern
Office of Communications, IIS

- Research Articles
- Press releases
- Interviewing Researchers
- Reading & Simplifying



2022 - 2022

Sci. Educator & Developer
Curiouscity Discovery Centre

- Concept Building
- Classroom Management
- Experimental Design
- Web Development
- Workshops & Training



2022 - 2023

Physics Faculty
Prep-ally Educational Services

- JEE, NEET, CBSE Preparation
- Delivering Physics Lectures
- Performance assessments
- Student-centered Learning
- Scientific Modelling

EDUCATION

Bachelor of Science (Research)
Materials Science and Engineering
Indian Institute of Science (IISc), Bangalore
2016 - 2020

Specialized in Computational Materials Science
CGPA 8.8/10 (graduated top of the class)

AWARDS & RECOGNITION

- **Sitaram Jindal Foundation Medal**
Awarded by the Council of the Indian Institute of Science, Bangalore, for best performance in four-year bachelor of science (research) in Materials Science 2019 - 2020
- **Kishore Vaigyanik Protsahan Yojana (KVPY) Fellowship**
Awarded by the Department of Science and Technology, Government of India 2016

WORK EXPERIENCE

Physics Faculty

Prep-ally Educational Services

Nov 2022 - Present

Coimbatore, Tamil Nadu

Taught physics to school children from grades 9-12 and tutored them for the Joint Entrance Examination (JEE) and National Eligibility cum Entrance Test (NEET) examinations. Responsibilities include:

- Preparing and delivering lectures on various topics in Physics in the JEE, NEET and CBSE Physics syllabus.
- Preparing assignments and question papers to monitor the student's level of understanding and problem-solving ability.
- Making classes lively using working models and explaining the science behind them.
- Conducting a physics summer camp where students got to build working models such as a Leyden Jar, Syringe generators, and DIY motors.

Science Educator and Developer

Curiouscity Discovery Centre

Feb 2022 - Oct 2022

Sarjapura, Bangalore

Taught school children (primarily grades 4-7) concepts in science such as electromagnetism and the properties of water using hands-on and interactive experiments. Communicated concepts in science to the general public. Responsibilities included:

- Building and maintaining a professional website using HTML, CSS and JavaScript - www.curiouscity.org
- Developing and conducting workshops and exhibits to illustrate concepts in science in a tangible way to audiences of all ages.
- Building models using 3D printing, electronics and laser cutting.
- Training volunteers in communicating science.

EXPERTISE

- Data Research & Analysis
- Project Management
- Literature Review
- Research Methodology
- Public Speaking
- Statistical Modeling
- Effective Communication
- Cross-functional Collaboration

COMPUTER SKILLS

- **Familiar:** LATEX, VASP, Quantum Espresso, LAMMPS, Apache
- **Experienced:** HTML, CSS, JavaScript, OpenFOAM, Git, Django
- **Proficient:** Python Programming

REFERENCES

- Available upon request

WORK EXPERIENCE (CONTINUED)

Science Communication Intern

Feb 2022 – Jun 2022

Office of Communications, Indian Institute of Science

Bangalore

Wrote articles and press releases about research and life at the Indian Institute of Science. Articles can be found at: <https://kernel.iisc.ac.in/author/rohith-kms/>. Responsibilities included:

- Interviewing researchers about their work and compiling the interviews into articles intended to be read by a lay audience.
- Reading peer-reviewed journal articles and simplifying them to avoid jargon-heavy language while retaining the important details.
- Writing press releases for current research at IISc.

ESL Editor

Sept 2021 – Dec 2021

Cactus Communications

Remote

Worked as an English language editor for academic journal articles in materials science and engineering, mostly written by researchers in Korea, China and Japan. Responsibilities included:

- Editing manuscripts for clarity, conciseness and grammar, along with ensuring relevant journal formatting requirements are met.

RESEARCH EXPERIENCE

Inter-dendritic segregation of Austenitic Stainless Steels

Jan – Jul 2020

Indian Institute of Science - Undergraduate Thesis Project

Supervisor: Prof. Abhik Choudhury

Simulated 2-dimensional solidification of austenitic stainless steels via Phase-Field simulations using an open-source computational fluid dynamics software, OpenFOAM. A custom solver was written for solving the Allen-Cahn equation.

Learning outcomes:

- Learnt about the theory and application of Phase-Field modelling.
- Gained experience in running simulations on computing clusters.
- Learnt to work with open-source software and read detailed documentation.

PROJECTS

aNANt 2D Materials Database

2018

- Was the lead developer of the aNANt 2D materials website (first version), containing over 23,000 molecular structures optimized by Density Functional Theory (DFT) calculations. The site is hosted at anant.mrc.iisc.ac.in
- Project uses HTML/CSS/javascript, Django, and Apache, for frontend, backend, and server side development, respectively.

GCODE - Automated Growth Curve Machine

2017

- Helped in the design and development of an automated bacterial growth curve measurement device (GCODE) - designed printed circuit boards, wrote software, and assembled and calibrated hardware. <https://2017.igem.org/Team:IISc-Bangalore/Hardware>
- Wrote documentation for device assembly.
- Project was nominated for the best hardware prize at the International Genetically Engineered Machine (iGEM) competition held in Boston, MA.