## AKHILESH KESAVAN

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## **EDUCATION**

MS Indian Institute of Technology Madras, Biological Sciences September 2021

(Part of the BS&MS Dual Degree Programme)

Thesis: "Identifying Interacting Partners of Ribosomal Proteins"

Advisor: Dr. Himanshu Sinha

**BS** Indian Institute of Technology Madras, Biological Sciences September 2021

(Part of the BS&MS Dual Degree Programme)

Minored in Nanotechnology

### HONORS AND AWARDS

## **Innovation in Science Pursuit for Inspired Research (INSPIRE)**

2014-2019

Awarded for a securing a top 10000 rank in the Joint Entrance Examination and pursuing Natural and Basic Sciences

#### RESEARCH EXPERIENCE

## **Indian Institute of Technology**, Madras

2019 to 2020

Undergraduate, Systems Genetics Lab, Dr. Himanshu Sinha

- Identified and cloned all ribosomal protein genes to further study ribosomal protein interactions
- Set up protocols for generating clones compatible to gateway cloning
- Performed extensive amounts of DNA extraction, purification and amplification as well as transformations

# Shantha Biotechnics/Sanofi, Hyderabad

May 2016

## Intern

- Studied the different protein estimation methods and their application in biopharmaceuticals and use in vaccine formulation
- Performed various protein extraction and purification techniques

## GeneTech, Hyderabad

December 2015

## Intern

- Project: Detecting common mutations in HBB gene by ARMS PCR for molecular diagnosis of Beta Thalassemia and Sickle Cell Anemia
- Project: Detecting number of CGG repeats in FMR gene for molecular diagnosis of Fragile X syndrome by PCR,

## TECHNICAL SKILLS

Wetlab: Molbio techniques, Genetic screens, Immunohistochemistry, Microbiology techniques

Software: BLAST, CD-HIT, Clustal W, GROMACS, MegaX, PyMol, VMD.

#### TEACHING EXPERIENCE

#### Freelance Tutoring, Hyderabad

September 2021 to Present

- Tutoring students from grade 10 to grade 12 in their respective mathematics and science curriculum
- Developed teaching materials required to better convey concepts on an online platform
- Materials include slides, images and animations

#### PROFESSIONAL AFFILIATIONS

**Biotech club**, Center for Innovation (CFI) IIT Madras, 2015-2016

• Part of the Biotech interest club organizing workshops and events.

Biofest, 2015-2016

• Head of the Marketing, Student Relations and Hospitality team of Biofest, 2016, the annual technical festival of the Department of Biotechnology, IIT Madras

#### PROFESSIONAL SERVICE

## **Engineering meets Evolution Symposium Co-Organizer**

EMBO, Symposium, 2021

#### **COMMUNITY SERVICE**

#### **Desh Ka Mentor**

Mentor, Hyderabad, August 2021 – September 2021

#### LANGUAGES

English, Tamil, Telugu, Hindi: Native Languages

French, Japanese, Chinese (Mandarin): Novice Listener, Speaker, Reading and Writing

## COMPUTER SKILLS

**Programming**: Proficient in Python and MATLAB. Familiar with R, C, C++, HTML and CSS

**Applications**: Proficient in Word, Excel, PowerPoint. Familiar with Photoshop and Illustrator

Platforms: Windows, Linux

#### **OTHER**

## **Interests and Hobbies**

- Reading mythologies and fiction
- Making pixel art and animation
- 3k MMR player in the Multiplayer Online Battle Arena game Dota 2
- Reviewing games