

# Nandakumaran S.

I'm a passionate and curious B.Tech student specializing in Artificial Intelligence and Data Science. I've built several hands-on projects ranging from facial recognition systems and parental control apps to medical image segmentation using deep learning. I enjoy solving real-world problems using data and have experience with Python, Power BI, and various ML tools. I'm currently looking for a Data Science internship where I can contribute to meaningful work while learning and growing alongside a strong team.

## Experience

### Software Developer, Octonauts Infotech

Sep 2024- Mar 2025

- Gained experience in Wordpress elementor, PHP , woo-commerce by working in a E-ticketing Project.

### Freelancing Full-stack Developer

Jan 2024 – Present

- Worked on web development projects using React, Next.js, and Node.js.
- Integrated data science tools into full-stack solutions, focusing on interactive visualizations and efficient data handling.

### Google Developer Group (GDG) Event Management Head

Jan 2024 – Present

- Led the organization of tech events, workshops, and seminars, bringing industry leaders from IIT Madras and ISRO.

## Projects

### Medical Image Segmentation using U-Net (Ongoing)

- Developing a deep learning model to detect Multiple Sclerosis (MS) regions from MRI scans using U-Net architecture. The focus is on grayscale mask processing, 3D volume handling with Nibabel, and PyTorch-based semantic segmentation.

### Satellite Image Segmentation using Deep Learning (2024)

- Built a U-Net based segmentation model to analyze and classify satellite imagery. Focused on tasks like land cover mapping and object detection using convolutional layers, skip connections, and pixel-wise prediction techniques.

### SNP Analysis & PRS Dashboard (Ongoing)

- Developed a full-stack platform to explore SNP (Single Nucleotide Polymorphism) data, filter disease-related variants, and calculate Polygenic Risk Scores (PRS) for specific genes and rsIDs. Integrated pathway enrichment insights and interactive data visualization using React (Next.js), Node.js, and Chart.js.

## Educational Background

### Bachelor of Technology in Artificial Intelligence and Data Science

Saveetha University, Chennai

Sep 2022-May 2026

- Specialization in Artificial Intelligence and Data Science
- CGPA - 8.3 (Jul 2024)

### Higher Secondary Education

SRV Matric. Hr. Sec. School, Trichy

May 2021

- Stream : Biology, Chemistry, Maths, Physics
- Percentage: 84%

## Contact

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## Skills

### Programming Languages:

Proficient: Python

Intermediate: JavaScript, C, C++,  
Java

### Data Science & Machine

#### Learning:

- Data Preprocessing, Exploratory Data Analysis (EDA), Model Development, Feature Engineering, Deep Learning (PyTorch, TensorFlow)
- Power BI, Matplotlib, Seaborn, Plotly
- Pandas, NumPy, Scikit-learn, Keras

### Databases:

- SQL (MySQL), MongoDB

### Web Development:

- Frontend: HTML, CSS, React (Next.js)
- Backend: Node.js, Express.js
- Tools & Technologies: Jupyter Notebooks, Docker, Git, Chart.js

### Soft Skills

- Communication
- Teamwork
- Punctuality
- Problem Solving

### Languages

- English (Fluent)
- Tamil (Fluent)
- Malayalam (Intermediate)

### Certification/Short Courses

- JAVA Masterclass course by letsupgrade
- MySQL&SQL training & internship by logritha.
- Hands on workshop on AI with ML&DS by Eudufabrica at IISc Bangalore.
- Runner-up in a national conference at Vel Tech High Tech Campus.