



SUMMARY

A motivated and detail-oriented Software Developer with a strong foundation in programming, problem-solving, and algorithm design, complemented by a Master's degree in Mathematics. Proficient in Python, Java, and C. Skilled in applying analytical thinking to optimize software applications and collaborating with cross-functional teams to deliver solutions within deadlines. Eager to learn emerging technologies and frameworks while leveraging technical expertise and a mathematical mindset to solve complex challenges and contribute to impactful projects

EDUCATION

Thiagarajar College

Master's Degree in Mathematics - 91%
2021 - 2023

Thiagarajar College

Bachelor's Degree in Mathematics - 94%
2018 - 2021

Nirmala Girls Higher Secondary School

HSC - 94%
2018

Nirmala Girls Higher Secondary School

SSLC - 97%
2016

CERTIFICATIONS

- Best Student Award for the year 2022-2023.
- Awarded Gold Medal for Academic Excellence in 2018-2021.
- Diploma in Mathematical Software: Essentials and Usage of Mathematica.
- Typewriting: First Class with Distinction in both Higher & Lower in Tamil.
- Typewriting: First Class with Distinction in both Higher & Lower in English.

SKILLS

Technical Skills

- C
- JAVA
- PYTHON
- Mathematica
- R Software
- Mat Lab
- MS Word
- MS Excel

Soft Skills

- Strong problem-solving skills, focusing on innovative and efficient solutions
- Motivated to learn new technologies and adapt to dynamic environments.
- Skilled in managing time efficiently to meet deadlines without compromising quality.

LANGUAGES

- Tamil
- English

WEBINAR

- Participated in international webinar on "Applied Mathematics" conducted by PG and Research Department of Mathematics, Thiagarajar College, Madurai(April 2022).
- Workshop on SOLID Principles and Software Development Foundations conducted by Scaler Academy, October 2024

PROJECT WORK

Dynamic behaviors of LOTKA-VOLTERRA Predator-Prey model incorporating predator cannibalism

This project analyzed the existence and stability of equilibria in predator-prey systems, focusing on how predator cannibalism affects ecological dynamics. It highlighted that moderate cannibalism stabilizes the system, enabling predator and prey coexistence, particularly when predator extinction is a risk. However, excessive cannibalism was shown to destabilize the system, potentially leading to prey extinction.

The study involved deriving equilibrium points, analyzing their stability, and conducting bifurcation analysis using Mathematica. MATLAB was utilized for numerical simulations to visualize dynamic behaviors, including population oscillations and extinction scenarios.

This work integrated theoretical modeling with computational simulations, offering insights into how behavioral traits influence biodiversity. It also strengthened technical skills in dynamical systems, ecological modeling, and numerical analysis.

Technologies Used

- Mathematica
- Mat Lab

DECLARATION

- I hereby declare that the above furnished particulars are true to the best of my knowledge belief.