

# SWOT Analysis on "AI Powered Drones"

strength

- \* Can perform task faster and more accurately than humans
- \* useful in many fields - delivery, farming, security & rescue
- \* Reduces human risk in dangerous environments

Weaknesses:

- \* High cost of development and maintenance
- \* Needs skilled people to operate and program
- \* May face technical issues like battery life and weather limits

Opportunities:

- \* Growing demand in industries like logistics and defense
- \* Can improve disaster response and environmental monitoring
- \* Integration with 5G & IoT can boost performance

## Threats:

- \* Privacy and security concerns from misuse

- \* Strict government rules on drone usage

- \* Risk of hacking or software malfunction

~~17/10/2025~~

Short term

Specific:

I want to build a strong base in AI & ML while also improving my drawing skills

Measurable:

I want to complete at least 2-3 small AI Projects

Achievable

I can do with regular practice and proper time management

Relevant: It helps me grow both technical and Creativity

Time bound: I will achieve in next 6-12 months only term.

Specific:

I want to build a creative tool using AI

Measurable: I will measure my progress with ~~before~~ completing my degree

Achievable: with constant efforts yes

Relevant: it helps in tech and Creativity

Time - Bound

3-5 years

10/11/2025

# Personal Development Plan (PDP)

Name: **Prateek Ninganuri**

Program: **B.Tech**

Goal: **To master Artificial Intelligence (AI), Machine Learning (ML), and Data Analytics**

Provisional No: **PROV/ASACBTECH/7/25/1266**

Advisor: **Thejaswi**

## 1. Self-Assessment

Prateek is a motivated B.Tech student with a keen interest in AI, ML, and Data Analytics. He has a good grasp of programming basics and logical thinking. His current strengths include Python, basic statistics, and problem-solving. Areas needing improvement include advanced mathematics, deep learning frameworks, and hands-on project experience.

## 2. Short-Term Goals (0–1 year)

Goal	Actions
Strengthen Core Foundations	Revise and master Python, statistics, and linear algebra for AI fundamentals.
Practical Exposure	Work on beginner-level AI/ML projects using open datasets from Kaggle or GitHub.
Certifications	Complete online certifications in AI/ML and Data Analytics through Coursera or Google.
Networking	Join AI/ML clubs, online communities, hackathons, and attend seminars.

## 3. Long-Term Goals (2–5 years)

Goal	Actions
Master Advanced AI Concepts	Learn deep learning, neural networks, computer vision, and NLP applications.
Research and Innovation	Contribute to research projects and publish papers in AI/ML conferences.
Internships & Industry Experience	Work with top companies or startups on applied AI solutions.
Career Establishment	Build a career as an AI/ML Engineer, Data Scientist, or Researcher.

## 4. Skill Development Plan

Prateek will follow a structured learning path with focus areas: Python, TensorFlow, Scikit-learn, and data visualization tools. He will develop both technical and soft skills—communication, teamwork, and analytical reasoning—through hands-on experience in projects, internships, and collaborative activities.



## 5. Action Plan & Timeline

Timeline	Key Activities
Semester 1–2	Strengthen programming, mathematics, and statistics foundations; complete small coding projects.
Semester 3–4	Enroll in ML/AI-focused courses; start internship or open-source contributions.
Semester 5–6	Work on advanced research-based projects; complete specialized certifications.
Semester 7–8	Publish final-year research paper and prepare for career placements or higher studies.

## 6. Monitoring and Review

Progress will be reviewed every semester with advisor Thejaswi. Key milestones include skill assessment, project completion, and feedback from mentors. Adjustments will be made as needed based on technological trends and personal growth.

**Advisor:** Thejaswi  
**Student:** Prateek Ninganuri

*End of Report*