Frontend Development:

HTML5, CSS3, JavaScript, TypeScript – Core building blocks of the web

React – Advanced use across multiple projects (portfolio, dashboard UI)

Next.js – Used for server-rendered web apps and fast frontend builds

Tailwind CSS, Bootstrap – Utility-first and component-based styling

Framer Motion, Shadcn/UI – Smooth animations and modern UI libraries

Responsive Web Design – Mobile-first and accessible layouts

Backend Development:

Python (FastAPI, Flask, Django) – API building and web frameworks

Node.js – REST API development and server-side scripting

PHP – Applied in full-stack projects like Online Placement System

Java (Core, OOP) – Academic and scalable backend solutions

C, C++ – Academic and systems-level programming

SQL, PostgreSQL, MySQL – Relational DBs used in backend and projects

MongoDB, DynamoDB – NoSQL experience in academic and cloud apps

RESTful APIs, Authentication, and Cloud deployment

AI & Machine Learning:

Pandas, NumPy, Scikit-learn – Data manipulation and modeling

Matplotlib, Seaborn – Data visualization tools

Jupyter Notebooks, Google Colab – Notebook-based development

Natural Language Processing (NLP), NLTK – Applied in Sentiment Analysis

Sentiment Analysis, Classification, Regression – Real-world ML tasks

Prophet, XGBoost – Forecasting and model optimization

Time Series Forecasting – Used in Food Pantry and Electricity projects

Large Language Models (LLMs) – OpenAI GPT-3.5/4, Gemini, Ollama, Mistral

RAG (Retrieval-Augmented Generation) – Applied in resume-based AI (GemAI)

LangChain, FAISS – Vector DB search integration

DALL·E 3 – Image generation

Tools & Workflow:

Git & GitHub – Version control and collaboration

VS Code, Postman – Dev environment and API testing

Firebase, Supabase – Lightweight backend integration

Vercel, Render, Railway – Hosting and deployment experience

pgAdmin – Database visualization and query tools

Docker (basic) – Containerized environments

TortoiseSVN – Version control system (academic use)

Agile Methodology, Team Collaboration – Project planning and coordination

Linux, Terminal Basics – Daily use in dev workflows

Amazon AWS, Amazon EC2 – Used in coursework and academic project

Other:

These are used for daily activities, some school level, some personal, and some for projects.  
E.g. teams, meet and outlook are mostly used for school projects, assignments. Used Powerpoint and Slides for most of the projects presentations like Food Pantry Analysis System, and Twitter Sentiment Analysis. Keep and Calendar are very helpful in daily activities to keep records  
- Microsoft Office 365 ( Word, Excel, Powerpoint, Teams, Outlook)  
- Google Suite (Docs, Slides, Sheets, Google, Meet, Calendar, Keep, Gemini, Drive)