

# PARTH TIRKAR

A web developer with a background in education and expertise in IT, including proficiency in RADAR system operations. Skilled in designing and developing websites and applications, from initial concept and layout to interactive features, backend functionality, and database management. Capable of applying analytical thinking, creative problem-solving, and efficient system management to streamline complex processes.

## WEB DEVELOPMENT PROJECTS

### 1. MyFlix

#### Personal project, CareerFoundry, April - July 2024

- Developed a non-relational database using MongoDB to store movement data from various styles and manage user information.
- Designed and implemented a REST API with Node.js and Express, utilising Mongoose for database interactions.
- Conducted API endpoint testing with Postman, documented the code clearly, and deployed the API on Heroku.
- Built two single-page, responsive front-end applications—one with React (adhering to the MVC design pattern) and the other with Angular (integrating Angular Material). Users can register accounts, explore the library, and save their favourite items.

[MyFlix API](#)   [Angular Client Demo](#)   [React Client Demo](#)

### 2. Meet App

#### Personal project, CareerFoundry, August 2024





- Created a progressive web application using React, designed to be responsive, cross-platform, and accessible offline, with the ability to be added to the home screen.
- Applied a test-driven development approach, converting user stories into unit and integration tests using Jest, conducting acceptance tests with Cucumber, and performing end-to-end testing with Puppeteer.
- Integrated serverless functions via AWS Lambda to handle user authentication and authorisation through OAuth.
- Managed development workflow using a Kanban board while adhering to agile methodologies.

[Meet App Demo](#)   [Open More Projects](#)

## PROFESSIONAL EXPERIENCE

APTIV, WUPPERTAL	MASTER THESIS	12.2022-09.2023
APTIV, WUPPERTAL	WORKING STUDENT	12.2021-11.2022
TU, CHEMNITZ	RESEARCH INTERNSHIP	09.2020-06.2021
ZEE NEWS LIMITED	OB TECHNICIAN	07.2017-09.2018
GUJARAT TV9 PVT LTD	TECHNICAL ASSOCIATE	05.2014-07.2017

- Developed and optimised RADAR signal processing techniques, interference detection, and ghost target simulation using MATLAB.
- Designed, prototyped, and validated RADAR sensors while improving procurement operations and agile project management tools.
- Developed an automated 3D point cloud generation system using survey data and force-directed graph algorithms, leveraging Python and MySQL.
- Managed network components, servers, and real-time broadcasts, ensuring seamless integration and performance.
- Oversaw file ingestion, server management, and deployment of video/audio solutions with technical infrastructure maintenance. [\(View More\)](#)

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## SKILLS

### Front End Development

- HTML, CSS, JavaScript, TypeScript
- Libraries / Frameworks (React, Redux, Angular, Material, Bootstrap, SASS/SCSS, jQuery)
- Responsive design, modals and touch interaction
- AJAX & JSON
- Version Control (Git)
- Test & Behavior Driven Development (unit testing, integration testing, acceptance testing, and end-to-end testing)
- Continuous Integration / Delivery
- Functional & object oriented programming ( C++, Python, MATLAB )
- Mobile Apps (React Native, Expo, PWA)
- CMS (Wordpress)
- UX/UI (Personas, user stories, user flows)

### Back End Development

- NodeJS & Express
- APIs (JSON, RESTful, Postman)
- Hosting & Web Services (AWS, Google Firestore, Heroku, Netlify)
- Relational & non-relational databases (PostgreSQL, MongoDB)

## EDUCATION

- Full-Stack Web Development**, CareerFoundry, March 2024 - August 2024
- Master of Science** in Information Communication Systems, TU Chemnitz, Graduated Oct 2023
- Bachelor of Science** in Electronics & Communication, NIT Surat, India, Graduated March 2014

## CERTIFICATES

- C language Intermediate course at C-DAC
- Language: English (C1), German (B1)
- Driving Licence: Class AB/B/L