

Praveenraj Pattar



Personal Details

DOB : 29/12/1989
Gender : Male
Nationality : INDIAN
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Industry/Academic Experience

Name of Institute	Designation	Duration		Roles
		From	To	
NCET, Bengaluru	Assistant Professor	03 rd Oct 2023	Present	Teaching, Research and BOS-Member
Siemens	Research Professional	14 th Nov 2022	04 th Sep 2023	Research Engineer
Nonceblox	Full-Stack Developer	27 th Dec 2021	04 th Nov 2022	Full Stack Development
TrakInvest	Full-Stack Developer	21 st Jun 2021	14 th Nov 2021	Full Stack Development
KLE Technological University, Hubli	Assistant Professor	01 st Jul 2017	30 th Apr 2021	Teaching and Research
B.V.B.C.E.T Hubli	Assistant Professor	01 st Aug 2016	30 th Jun 2017	Teaching and Research
B.V.B. C.E.T Hubli	Teaching Assistant	01 st Aug 2015	31 st Jul 2016	Teaching and Research
INTEL India Pvt, Ltd. Bangalore	Intern	16 th Jul 2013	29 th Oct 2014	Development

Technical Knowledge

- HTML5, CSS3, Bootstrap, JavaScript, Typescript
- Angular, ReactJS
- NodeJS, NestJS, API-GATEWAY
- Micro Services(RabbitMQ, Spring-boot, AWS SQS)
- C, Java, Python
- MySQL, Postgres, MongoDB
- GitHub, Bitbucket, JIRA, ASANA.
- PowerBI, Metabase

Projects

Project Title	Description
Embedded Dashboard creation	<p><u>Definition:</u> To Create the Dashboard for dynamic Data Updating.</p> <p>Explanation: Here I did research of dashboarding tools for visualizing the terabytes of data. Tools like PowerBI, Tableau, Sisense, Qlik etc., were able to show the data visualization but we had to move out of current application if I want to add new graphical representation. Tool called Metabase allowed me to embed the terabyte of data visualization inside the current application itself with full-app embedding. I was able to create dynamically new graphical representations on dashboard without needing to go back to code to add new view.</p>
Open Scenario Editor	<p><u>Definition:</u> To Create the UI elements for scenario creation.</p> <p>Explanation: The goal of this project is to create a web-based application using the Three.js library for rendering 3D models and creating interactive scenarios. The application will allow users to import 3D models of objects such as cars and people, and then place them in a 3D environment. Users will also be able to add various elements such as buildings, roads, and other objects to the environment to create a complete scene.</p>
Crypto Exchange	<p><u>Definition:</u> To exchange the crypto between the costumers.</p> <p>Explanation: Here I have used ReactJS to develop the frontend. Used the NodeJS as backend. Here the main functionality was list the cryptocurrencies and exchange by selling and buying. Here when user logs into the system, first he verified with 2FA for the mobile and email. Once both gets verified then user need to submit KYC documents to validate the person's authentication. Once KYC documents are verified by admin them, he is allowed for transactions. To make transactions we he need to put in the bank details. Again, bank details are verified and approved by admin. Once all the approval process gets completed then, customer is allowed to deposit the minimal amount into the wallet, then start making exchanges. Exchanges are allowed only when sufficient balance is in wallet or buying crypto is in lesser value than in the wallet balance, else not allowed to buy. Unique Wallet Generation happens and then associated crypto can be deposited to that wallet address. In this BTC, LTC, ETH, USDT(tether), MATIC have been supported. In this EVM chain based ERC20 Tokens are also supported. The crypto exchanges were supported by another service for which API request were made and then brought/sold the crypto.</p>
Code Assessment Platform (CAP)	<p><u>Definition:</u> To demonstrate, Integrated Development Environment that contains all the necessary tools for developing computer programs and supports different programming languages.</p>

	<p><u>Explanation:</u> I have used Angular for frontend to display the content. Before proceeding into solving a problem, user has to login, which is taken care by JWT login along with Social login. New user's details are maintained in AWS Cognito User Pool. New signup will have to verify through email and other details for verification. Once verified, the request from user's API is going through API GATEWAY using socket.io for connecting to services. User then selects the problem to solve, then chooses the language to code. Here moncao editor is integrated to write the program. Once user completes writing the code, can check the logic of code against trivial test cases. Once he/she feels fine submits the code. Submitted code is review against hidden test cases to verify meeting all requirement of the defined problem statement. Submitted code is passed to RabbitMQ platform as part of micro-service implementation to broadcast to CAP platform to verification. Once code is verified from CAP platform it sends the result to user.</p>
Enterprise Platform	<p><u>Definition:</u> Enterprise Platform Development for allowing multiple tenants to store multiple applications with multiple user's details.</p> <p><u>Explanation:</u> I have used AngularJS for frontend to display the content NESTJs for the backend and Postgres database to store the details. Before proceeding into platform, tenant has to login, which is taken care by JWT login along with optional Social login. New tenant's details are maintained in AWS Cognito User Pool. New signup will have to verify through email and other details for verification. Once verified, the request from user's API is going through API GATEWAY for connecting to services. Tenant then selects the users who get registered through applications launched by tenants. User has particular role, whether as site admin or client admin or client employees and so on. The html pages displayed on the site are done by using generating JSON files (not writing HTML for every page).</p>
Players Management	<p><u>Definition:</u> To demonstrate the player's information.</p> <p><u>Explanation:</u> I have used Angular for frontend to display the content. Before proceeding into solving a problem, user has to login, which is taken care by Social login or user signup. New user's details are maintained in Postgres's database. Once verified, the request from user's API is going through API GATEWAY using socket.io for connecting to services. User then selects the player to view details. User also has provision to add new player details against the fields mentioned. New record is to passed to RabbitMQ micro-service to establish connection to the database to store the details. Once user completes adding new player details, can look up in the displayed list using pagination technique. User can edit the newly added player</p>

	details in-case some changes required. He/she has provision to delete the player from the displayed list.
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Thesis's Details

Master of Technology (M.Tech) in Computer Science and Engineering

Thesis Title : Sandalwood Tree Protection Using Bluetooth version 4.0 Technology
 College : B.M.S. College of Engineering, Bangalore-560 019
 University : Visvesvaraya Technological University, Belgaum-590 014
 Year : 2015
 Class : First Class with Distinction
 Project Guide : Dr G Varaprasad

Bachelors of Engineering (B.E) in Information Science and Engineering

Thesis Title : Infrastructure service automation from cloud (ISA4C)
 College : University Visvesvaraya College of Engineering, Bangalore-560001
 University : Bangalore University, Bangalore-560056
 Year : 2012
 Class : First Class
 Project Guide : Mr. Kiran K

Academic Details

Course	Branch	Institution	University / Board	Year of Passing	Class
M.Tech	Computer Science and Engineering	B.M.S. College of Engineering, Bangalore.	VTU	2015	Distinction
B.E	Information Science and Engineering	University Visvesvaraya College of Engineering, Bangalore.	Bangalore University	2012	First
12th	Science	Sainik School Bijapur.	CBSE	2007	First
10th	General	Sainik School Bijapur.	CBSE	2005	First

List of Funded Projects/Grants

Title	: Automatic Detection and Notification of Humps on Roads to Aid Drivers
Organisation	: Vision Group on Science and Technology (VGST), Govt. of Karnataka, India.
Ref. number	: VGST/TRIP-108/2014-15 Dated: 03-03-2015.
Started on	: March 2015.
Duration	: 5 Months.
Amount	: ₹ 30,000/-
Status	: Completed

List of Publications

- Rajeshwari M, Santhosh Hebbar, **Praveenraj Pattar** "*Automatic Detection and Notification of Potholes and Humps on Roads to Aid Drivers*" **Sensor Journal, IEEE**, Vol. 15, No.8, pp. 4313-4318, 2015, **DOI: 10.1109/JSEN.2015.2417579, Impact Factor: 1.852.**
- Santhosh Hebbar, **Praveenraj Pattar**, Varaprasad G., "*A Mobile ZigBee Module in Traffic Control System*", in **Potentials, IEEE**, vol. 35, no. 1, pp. 19-23, Jan-Feb 2016. **DOI: 10.1109/MPOT.2014.2341331**
- Hebbar, Santhosh; **Pattar, Praveenraj**; Madli, Rajeshwari; Golla, Varaprasad, "*Sandalwood tree protection using Bluetooth version 4.0*" in , **International Conference on Computing and Network Communications (CoCoNet)**, pp.620-626, 16-19 Dec. 2015 **DOI: 10.1109/CoCoNet.2015.7411253**
- G.P. Rajesh, **P. Pattar**, M.N. Divya and V. Prasad, "Near field application: NFC Smart Board", **International Conference on Wireless and Optical Communications Networks (WOCN)**, pp.1-5, 21-23 July 2016. **DOI: 10.1109/WOCN.2016.7759887**
- G.H Joshi Vidya Handur , Priyadarshini D Kalwad , Mahesh S Patil , Vishwanath G Garagad , Nagaratna Yeligar , **Praveenraj Pattar** , Deepak Mehta , Preethi Baligar "*Integrating Class and Laboratory with Hands-on Programming: Its Benefits and Challenges*", **4th International Conference on MOOCs, Innovation and Technology in Education (MITE)**, pp 163-168, 2016. **DOI: 10.1109/MITE.2016.041**

Courses taught

- Programming in C
- Engineering Design
- Software Testing
- Social Innovation
- Data structures with C

Certificate

Title	State Eligibility Test (SET) for Lecturer / Assistant Professorship in Computer Science and Applications
Issuer	Karnataka State Eligibility Test Center (KSET)
Roll No	15240263 Dated: 31/12/2017

Professional Skills

- Good communication skills
- Good analytical skills.
- Ability to learn new things quickly.
- Flexible to any environment.

Curricular Activities

- Attended 12 Day TEQIP Sponsored Workshop on **"Fundamentals of Machine Learning"** conducted at KLE Technological University, Hubballi in Collaboration School of Mechanical Engineering and School of Computer Science and Engineering during 17th June to 29th June 2019.
- Attended 6 Day TEQIP Sponsored Workshop on **"Python Programming"** conducted at KLE Technological University, Hubballi in Collaboration School of Mechanical Engineering and School of Computer Science and Engineering during 10th June to 15th June 2019.
- Conducted Workshop on **"Python"** at Ramgarh Engineering College, Murubanda, Jharkhand from 18th July to 20th July 2019.
- Attended workshop on **"Hands-on Workshop on Internet of Things"** conducted at KLE Technological University, Hubballi in Collaboration with IoTHive, IEEE Computer Society during 06th Jan to 07th Jan 2018.
- Attended workshop on **"Machine Learning"** conducted at CSI Mumbai Chapter, Mumbai during 16th June to 17th June 2017.
- Attended workshop on **"Integral Transforms and Differential Equations in Engineering Applications"** conducted at B.V.B. College of Engineering and Technology, Hubballi sponsored with TEQIP-II during 06th March to 07th March 2017
- Attended workshop on **"Machine Learning with Python"** conducted at B.V.B. College of Engineering and Technology, Hubballi sponsored with TEQIP-II during 03th March to 05th March 2017.
- Attended workshop on **"Internet of Things"** conducted at B.V.B. College of Engineering and Technology, Hubballi sponsored with TEQIP-II during 13th May to 14th May 2016.
- Attended workshop on **"Cloud Computing"** delivered by Innovians Technologies (India) and conducted at B.V.B. College of Engineering and Technology, Hubballi during 11th May to 12th May 2016.

- Attended workshop on "**Big Data and Hadoop**" conducted at B.V.B. College of Engineering and Technology, Hubballi during 04th February to 7th February 2016.
- Attended workshop on "**Python Programming Fundamentals**" conducted at Nitte Meenakshi Institute of Technology, Bangalore sponsored with TEQIP-II grants in association with Infosys Campus Connect Train the Trainer Program during 04th January to 6th January 2016.
- Attended workshop on "**Cloud Computing Tools**" conducted at Thaigarajar College of Engineering, Madurai sponsored with TEQIP-II grants during 15th October to 18th October 2015.
- Attended workshop on "**Implementation Issues of IPv4 and IPv6**" conducted at B.M.S College of Engineering sponsored with TEQIP-II grants during 23rd September to 29th September 2013.
- NCC "B" Certificate holder dated 09/04/2007.
- Zonal level Football and Volleyball player during 2003 and 2005 respectively.