

ATHARVA SHIRKE

+91 9309794449 | Pune, India

atharvashirke77@gmail.com | [linkedin.com/shirkeatharva/](https://www.linkedin.com/shirkeatharva/) | github.com/atharva2001

OBJECTIVE

I am a problem-solving engineer with a proven track record in software development. Currently employed as a Software Engineer at Persistent Systems, I specialize in Machine Learning, Python backend development, server management, and Extended Reality. I possess strong skills in Data Structures and Algorithms and have a demonstrated ability to learn new technologies quickly. My role at Persistent Systems involves working in the Machine Learning and Extended Reality domains with a focus on Python backend development and server management. I am a great learner and a good team player, consistently contributing to high-quality project outcomes. I am passionate about leveraging my technical expertise and problem-solving abilities to contribute effectively to team goals and drive organizational success.

EDUCATION

Bachelor of Technology , N B Navale Sinhgad College of Engg., Solapur University	9.68 CGPA
H.S.C , Sangmeshwar College, Solapur	68.77%
S.S.C , St. Joseph High School, Solapur	87.44%

TECHINICAL EXPERTISE

Languages:	Java, Python, PHP, C, C++, HTML, CSS, JavaScript, React.
Frameworks / Libraries:	Django, Django Rest-Framework, FastAPI.
Technologies:	Large Language Models, Fine Tuning LLM's, Retrieval Augmented Generation, Extended Reality, Data Visualization, Deep Learning.
Databases:	MySQL, MongoDB, SQLite3, SQL, RDBMS, Vector DB(PineCone, FAISS, Chroma DB).
Tools:	Unity, Blender.
Others:	Linux, Shell Scripting, Git, AWS, Heroku, Salesforce, GCP, Gemini, OpenAI.

EXPERIENCE

Software Engineer (R&D) Persistent Systems Ltd.	Sept 2023 - Present <i>Pune, IND</i>
---	---

- As a Software Engineer, I have gained extensive experience in implementing advanced algorithms and developing innovative solutions for various business use cases. I have successfully implemented Object Detection and Instance Segmentation algorithms using YOLO and R-CNN, providing robust and efficient solutions for real-world applications. My collaboration on the development of a custom GPT, leveraging LangChain and Llama Index for Retrieval-Augmented Generation (RAG), has enabled me to create intelligent systems that can retrieve and generate relevant information effectively.
- In addition to these accomplishments, I have developed embeddings for RAG models using OpenAI and Ollama, ensuring high-quality data representation and storage in Vector databases such as Pinecone. This has significantly enhanced the performance and accuracy of our retrieval systems. My expertise extends to building React applications for Mixed Reality (MR) and Augmented Reality (AR) Proof of Concepts (POCs), where I have contributed to the creation of immersive and interactive experiences.
- Furthermore, I have developed robust backend solutions using FastAPI and MongoDB, ensuring seamless integration and optimal performance of our applications. My ability to work with diverse teams and collaborate effectively has been instrumental in delivering high-quality solutions on time. I am proficient in various programming languages and frameworks, which has allowed me to adapt quickly to new technologies and challenges.
- Overall, my experience and skills in implementing advanced algorithms, developing intelligent systems, and creating innovative applications have equipped me with the knowledge and expertise to drive success in any software engineering role.

Software Engineer Intern

Persistent Systems Ltd.

June 2023 - Sept 2023

Remote, IND

- As a Java Salesforce Intern, I acquired skills in Java, HTML5, CSS3, JavaScript, and Ajax while gaining a comprehensive understanding of Salesforce implementation. This experience allowed me to understand the intricacies of integrating Salesforce with various technologies.
- Additionally, I worked as a Python Developer, where I developed efficient software solutions and honed my Python programming skills. This role involved creating robust backend systems and collaborating with team members to deliver high-quality software projects.
- These experiences have provided me with a solid foundation in both front-end and back-end development, equipping me with a versatile skill set for software engineering roles.

Machine Learning Intern

Knowledge Solutions India

July 2021 - Sept 2021

Remote, IND

- As a Machine Learning Intern, I learned the workings of machine learning algorithms and gained in-depth knowledge about neural networks.
- During my training, I successfully built a Heart Disease Recognition model, applying my understanding of machine learning techniques to develop an effective and predictive healthcare solution.
- This experience provided me with practical skills in model development and a solid foundation in machine learning principles.

PUBLICATIONS

Published a research paper on ***“JOB SEARCH IMPROVING TECHNIQUE USING RECOMMENDATION SYSTEM AND OPEN AI.FOR FREELANCERS”*** in ***Lakshmi Book Publications (ISSN: 2249-894X)***.

PROJECTS

Biddings.[Python, Django, SQLite3, Heroku] Developed a Django web application that bridges the gap between service providers and service seekers, specifically targeting freelancers. Hosted on Heroku, the platform facilitates connections and transactions, helping freelancers find work efficiently.

[Source Code](#)

Handwritten Text Extraction. [Django, Python, Deep Learning] Built a Deep Learning Model for extracting text from images. Trained on Neural Network. Had an accuracy of around 80%. It is a Django Web App.

[Source Code](#)