



SUMMARY

- Developed a vision system using Python and OpenCV to generate accurate **3D coordinates for welding robots** in an **industrial automation setup**.
- Collaborated with **Zasmlabs Pvt. Ltd.** on the development and evaluation of **AI and Machine learning** projects.
- **1 year** of hands-on **Software Development** experience with **Autodesk**, specializing in **C++, Qt**
- Conducted sessions at various colleges to inspire and educate students on “**The Role of Mathematics in Industry**”, sharing insights from my experience as an industry expert.
- **1.5 years** of expertise as a **Subject Matter Expert (SME)** and **E-Tutor** in the **educational IT sector**.
- Served for 1.5 years at **Yogendra Sangale Social Foundation**, where I led financial planning and collaborated on socially impactful initiatives at the leadership level.
- **2.5 years** of leadership experience as the **Founder & Director** of an **educational organization**.
- A remarkable **13+ years** of dedication as an **Assistant Professor in Mathematics** for both postgraduate and undergraduate students.
- My subject expertise lies in **Applied Engineering Mathematics**, covering a wide spectrum of topics, including:
 - ❖ **Linear algebra**, Complex Analysis, Ordinary and Partial Differential Equations
 - ❖ **Multivariable Calculus, Vector Calculus**, Transformations, **Computational Geometry**
 - ❖ Group, Ring and Field Theory, **Statistics, Probability**

This diverse skill set positions me to excel in challenging roles, leveraging my strong foundation in **Mathematics** and extensive experience in **Software Development** and **Education**.

PROFILE

- Results-driven Software Developer with a strong foundation in Mathematics and a passion for data-driven technologies, seeking challenging roles in **AI, ML** and **Data Science**.

TECHNICAL SKILLS / PROFICIENCIES

Skills	: Python, R, C++, Mathematical Modeling, Vision System Solution, HPC (High-Performance Computing), Parallel Computing, Multithreading, OpenMP, MPI, CUDA.
Database	: SQL
IDEs	: Microsoft Visual Studio, Spyder, R-Studio, Jupiter Notebook, Qt Creator
Libraries	: Numpy, Pandas, OpenCV, Sci-kit learn, Matplotlib, Sympy
Versioning Tools	: GitHub
Software Tools & Applications	: JIRA, Qt Designer, Google COLAB, REPLIT,
Kaggle Operating Systems	: Windows, DOS

PROFESSIONAL EXPERIENCE SUMMARY

- **Freelance Software Developer**
Freelancing Work Feb 2023 – Till Date
 - Engaged in freelance **Software Development Projects**, focusing on **Vision Systems**.
 - Utilized **Python**, the **OpenCV library** and advanced **image processing techniques** to contribute to industrial automation projects.
 - Utilized a **Vision System** to precisely **measure dimensions & identify Coordinates** of real-world objects.
- **Member of Technical staff**
Centre for Computational Technologies (**CCTech**), Pvt. Ltd, Pune. Jan 2022 – Jan 2023
Client: Autodesk Inc.
Working as a **Member of Technical staff** for the **Infraworks** team. The team develops and maintains features for the **Autodesk Infraworks** software which falls under the Building and Infrastructure domain.
 - Worked on migration of Autodesk InfraWorks from Qt5 to Qt6 using **C++, JavaScript & Qt framework**. **Environment: C++, JIRA, GIT, Qt, JavaScript, Microsoft Visual Studio.**

- **Founder & Director**
Dipjyoti Home Tutions, Pune. Jun 2018 – Jan 2021
 - Successfully managed an academic institute specializing in **Mathematics** for students across various academic levels like **Jr College, Engineering, BCS, MBA, ME.**

- **Technical Proof Reader and Subject Matter Expert (SME)**
Flipick Private Limited, Viman Nagar, Pune Dec 2019 – Jun 2020
 - Developed topic-wise study plans and exam structures for a JEE exam-focused educational app, providing **Mathematics** solutions.

- **Assistant Professor**
Sinhgad College of Engineering, Vadgaon(BK), Pune Jan 2013 – Jun 2018
 - Taught **Engineering Mathematics** subject to **undergraduate Engineering** students.
 - Taught **Advanced Mathematics** subject to **Master of Engineering** students.
 - **Held key positions** such as Sport Coordinator, Library Coordinator and Exam Coordinator.

- **E-Tutor**
Techknit IT Enabled Services Pvt. Ltd, Pune Sep 2007 – Mar 2008
 - Instructed online **Mathematics and Statistics** courses to students in the **US** and **UK** up to the graduation level.

PROJECTS

Following Projects did in **Python** and libraries used: **Numpy, Pandas, OpenCV, Matplotlib, SkLearn, Pickle.**

- Implemented a **Vision System** to accurately measure the dimensions of real-world objects.
- Second Hand Car Price Prediction – Eliminating agent's malpractices on buying and selling
- IPL Auction – Grouping best team for Mrs. Neeta Ambani
- Helping YouTube – Maximizing advertise revenue
- Identifying the Defaulter – Processing CIBIL score and demographic data for bank's loan department

CERTIFICATIONS

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|---|-----------------------|
| ❖ Fundamentals of Accelerated Computing with CUDA Python | June 2025 - June 2025 |
| ❖ Machine Learning with Industry-Ready Project | June 2024 - Nov 2024 |
| ❖ Data Science with Python Course: Hands on Data Science 2021 | Oct 2021 – Nov 2021 |
| ❖ Data Science 2021: Complete Data Science & Machine Learning | Sep 2021 – Oct 2021 |
| ❖ Easy Python Programming Beginners Pro Python SQL, MySQL, Mongo | Sep 2021 – Oct 2021 |
| ❖ The Complete Python Course Learn Python by doing | Aug 2021 – Sep 2021 |
| ❖ NPTEL online Certification with Gold Medal (5% Topper)
Indian Institute of Technology, Kanpur | Jul 2017 – Sep 2017 |
| ➤ Introduction to R Software | |
| ❖ Aptech Computer Education Certification | Jun 2000 – Jul 2002 |
| ➤ Object Oriented Programming using Java 2.0 | |
| ➤ Desktop Application using VB.NET | |

EDUCATION

M.Sc. Mathematics	Savitribai Phule Pune University, Pune	First Class	July 2007
B.Sc. Mathematics	Savitribai Phule Pune University, Pune	First Class	June 2005

DECLARATION

I hereby declare that all information submitted is true, complete and correct to the best of my knowledge and belief.



Mr. Sachin Chandrakant Bidwai