

Pradumn B Chavan

pradumnp@gmail.com | +91-8408919340 | [linkedin.com/in/pradumn-chavan](https://www.linkedin.com/in/pradumn-chavan)

Professional Summary

Bioinformatics Engineer with 4+ years of industry experience applying first principles to develop scalable NGS data pipelines and precision diagnostic tools. Proficient in Python, AWS cloud services (Lambda, Batch, S3, Step Functions), and MongoDB. Experienced in preprocessing and integrating large-scale genomic knowledgebase data such as COSMIC, gnomAD, ClinVar, and PubMed etc. Strong focus on automation, code testing, and cross-functional collaboration in precision medicine domains.

Technical Skills

- **Languages:** Python, BASH
- **Cloud & DevOps:** AWS (Batch, Lambda, S3, ECR, Step Functions), Docker, Jenkins
- **Databases:** MongoDB, MySQL
- **Frameworks:** pandas, Flask(Beginner), NCBI E utils.
- **Tools:** Git, GitHub, Bitbucket, UiPath
- **Bioinformatics Tools:** FASTQC, Bwotie, Samtools, Picard, GATK, SnpEFF, Transvar, IGV
- **NGS:** DNA-Seq

Experience

Bioinformatics Engineer, Velsera

June 2021 – Present, Remote

- Supported knowledge base development for an oncology reporting system used to generate customized treatment recommendations.
- Engineered a suite of Python tools that automated key processes, leading to a more than 90% improvement in our team's workflow efficiency.
- Designed and deployed automated tools using AWS services (Batch, Lambda, S3, ECR, and Step Functions) for large-scale processing.
- Wrote clean and modular Python code to preprocess and integrate complex cancer-related data from diverse sources like COSMIC, gnomAD, ClinVar, Pubmed etc.
- Wrote unit tests for code validation and ensured robust, modular design.
- Managed MongoDB-based pipelines for variant data storage and access.
- Collaborated with cross-functional stakeholders to define features and improve diagnostic data processing.
- Worked in an agile team following Scrum methodology, contributing to sprint-based delivery and iterative development.
- Used JIRA, Confluence, and Qualtrax for task tracking and quality compliance.

Education

M.Sc. in Bioinformatics, Bioinformatics Center, SPPU, Pune
CGPA: 8.9/10

2019 – 2021

B.Sc. in Bioinformatics, MGM Institute of Bioscience, Aurangabad

2016 – 2019

Honours

- Awarded DBT-GOI studentship for securing top 10 rank in M.Sc. Bioinformatics 1st year.