# MEET KOTHARI

**Bioinformatician**

Bengaluru, India | +91 88286 33826 | kotharimeet14@gmail.com
linkedin.com/in/meetkothari1 | github.com/kotharimeet14-afk

## PROFESSIONAL SUMMARY

MSc Bioinformatics candidate with hands-on experience designing and implementing bioinformatics solutions for complex research problems, spanning NGS data analysis, genome assembly QC, variant calling, and transcriptomic pipelines. Proficient in Python, R, and Linux/Ubuntu environments, with practical exposure to GATK, BWA, HISAT2, Samtools, BUSCO, and QUAST across research and industry projects. Combines wet-lab genomics grounding with computational rigor to deliver reproducible, well-documented bioinformatics workflows.

## QUALIFICATIONS

- **Education:** MSc Biotechnology and Bioinformatics, IBAB Bengaluru (Expected June 2026) — satisfies Master's in Bioinformatics requirement.
- **Operating systems & languages:** Proficient in **Ubuntu/Linux**, **Python**, and **R** (Bioconductor), plus Shell scripting, SQL, Java, C/C++.
- **Data stats, QC & assembly:** Hands-on with genome assembly QC and validation using **BUSCO**, **QUAST**, and taxonomic profiling; RNA-seq QC, normalization, and differential expression statistics using **DESeq2** and **edgeR**.
- **Functional annotation & variant tools:** Working experience with **GATK4**, BWA, HISAT2, Bowtie2, and Samtools for variant calling and alignment workflows; genome assembly with SPAdes.
- **Experience:** ~1 year of hands-on genomics/bioinformatics project and internship experience (clinical genomics lab + industry data analyst project), within the 0-5 year range sought.

## TECHNICAL SKILLS

- **NGS & Bioinformatics:** RNA-seq, variant calling, genome assembly, DESeq2, edgeR, GATK4, BWA, HISAT2, Bowtie2, Samtools, SPAdes, QUAST, BUSCO, Seurat, QIIME II.
- **Programming & Platforms:** Python, R (Bioconductor), Ubuntu/Linux, Shell scripting, SQL, Java, C, C++.
- **Wet Lab & Molecular Biology:** DNA/RNA extraction, NanoDrop quantification, agarose gel electrophoresis, PCR, qPCR, primer design, Sanger sequencing, SDS-PAGE, clinical biobanking.
- **Laboratory Operations:** SOP compliance, documentation, laboratory safety, sample processing, client-facing technical reporting.

## PROFESSIONAL EXPERIENCE

**Genomics Data Analyst (Project)** | *Microleer* *Apr 2026*

- Designed and implemented **genome assembly QC and validation workflows** using Python and Shell, directly analogous to bioinformatics solution design for complex research problems.
- Assessed assembly completeness and contamination using **BUSCO, QUAST**, and taxonomic profiling pipelines — core QC and assembly evaluation tools.
- Prepared client-facing reports evaluating industrial applicability of isolates, translating pipeline output into actionable analytical insight.

**Clinical Genomics & Molecular Biology Intern** | *ACTREC Cancer Genetics Lab* *Jun 2025 - Jul 2025*

- Managed clinical biobanking and extracted genomic DNA from ~100 patient samples, with quality assessment via NanoDrop and gel electrophoresis — high-throughput sample QC at scale.
- Executed and optimized conventional, gradient, and touchdown PCR workflows; performed Sanger sequencing, chromatogram analysis, and MLPA-based variant analysis.
- Maintained strict SOP compliance, lab safety, and documentation standards — reflects defined-SOP delivery and workflow discipline.

## SELECTED PROJECTS

**Resolving Shared and Disease-Specific Transcriptomic Signals Across Diseases** | *MSc Dissertation*

- Analyzed RNA-seq datasets from GEO and SRA using reproducible **Bioconductor** workflows in R, on Linux-based compute environments.

- Performed QC, normalization, differential expression, and pathway analysis using **DESeq2** and **edgeR** across Rheumatoid Arthritis, Type 1 Diabetes, and Systemic Lupus Erythematosus datasets.

## HACKATHONS

- **ML for Protein Engineering Hackathon (2025):** Applied machine learning and protein modeling approaches for therapeutic antibody redesign.
- **Novo Nordisk GBS Hackathon (2025):** Developed an Electronic Case Report Form consolidator tool to streamline clinical trial data aggregation.

## EDUCATION

**MSc Biotechnology and Bioinformatics** | *IBAB, Bengaluru* *Expected Jun 2026*

- Institute of Bioinformatics and Applied Biotechnology
- CGPA: 7.27/10

**BSc Biochemistry, Genetics and Biotechnology** | *JAIN University, Bengaluru* *Graduated May 2024*

- CGPA: 8.16/10

## PUBLICATIONS & ACHIEVEMENTS

- Publication: "Advancements in DNA Fingerprinting Technology, Methods, and Environmental Applications" (2024).
- Winner, Lakshya Business Plan Competition, ICEIL 2023, Amity University.
- Genome Informatics Course Certification - Sciomic and JAIN University.