

# Shriyansh Singh

+1 930 333 5141 | [shriyansh.singh24@gmail.com](mailto:shriyansh.singh24@gmail.com) | [linkedin.com/in/shriyansh-bir-singh](https://www.linkedin.com/in/shriyansh-bir-singh)

## SUMMARY

Empathetic and creative Machine Learning Engineer dedicated to crafting advanced ad targeting models. Expert at transforming data into strategic insights while championing teamwork and innovation

## PROFESSIONAL EXPERIENCE

<b>Machine Learning Engineer Intern</b> <i>Hyphenova AI</i>	<i>Apr 2024 – Present</i> <i>Los Angeles, CA</i>
<ul style="list-style-type: none"><li>Developed ad targeting models using Sparse Logistic Regression and Deep &amp; Wide architectures in TensorFlow, enhancing ad relevance by 20% and click-through rates by 15%</li><li>Implemented convolutional and DSSM-based deep learning models to analyze user search queries, elevating conversion predictions by 18%</li><li>Constructed scalable data pipelines with Apache Spark and Kafka to process multi-terabyte logs in near-real time, reducing latency by 30%</li><li>Integrated model deployment with Docker, Kubernetes, and CI/CD pipelines on AWS, achieving automated updates and a 25% boost in system stability</li><li>Partnered with product and business teams to tailor ML strategies to advertiser objectives, optimizing ad performance ROI</li></ul>	
<b>Machine Learning Engineer Intern</b> <i>Enterprise Business Technologies Pvt. Ltd</i>	<i>Feb 2023 – May 2024</i> <i>Mumbai, India</i>
<ul style="list-style-type: none"><li>Engineered ensemble models (Gradient Boosting, Random Forest) for ad click prediction, improving AUC scores by 16% and validating targeting strategies</li><li>Optimized feature extraction from large-scale sparse datasets using custom Python and SQL routines, reducing manual preprocessing by 50%</li><li>Designed and executed A/B experiments to refine ad ranking algorithms, resulting in a 12% uplift in merchant conversion</li><li>Automated model monitoring and feedback loops with Docker and Kubernetes, streamlining performance tracking and reducing error margins by 10%</li><li>Collaborated with cross-functional teams to integrate user behavior analytics into ad targeting pipelines, driving improved ROI and user engagement</li></ul>	

## EDUCATION

<b>Indiana University Bloomington</b> <i>Master of Science in Data Science</i>	<i>Aug 2023 – May 2025</i> <i>Indiana, United States</i>
<ul style="list-style-type: none"><li>Relevant Coursework: Data Visualization, Big Data Applications, Cloud Computing, Graph Analytics, Applied ML, Deep Learning, Computer Vision, Statistics</li></ul>	
<b>University of Mumbai</b> <i>Bachelor of Engineering in Electronics</i>	<i>Aug 2018 – May 2022</i> <i>Maharashtra, India</i>

## TECHNICAL SKILLS

**Programming Languages:** Python, C++, Shell, SQL  
**ML Frameworks:** TensorFlow, PyTorch, MXNet, Scikit-learn, Keras, XGBoost  
**Algorithms:** Sparse LR, DFFM, Deep & Wide, DSSM  
**Big Data & Pipelines:** Apache Spark, Kafka, Hadoop, Azure Data Factory  
**Cloud Platforms:** AWS (S3, EC2, SageMaker), Azure, GCP (BigQuery)  
**DevOps & Tools:** Docker, Kubernetes, Terraform, CI/CD, Git, GitHub  
**Databases:** PostgreSQL, MySQL, MongoDB, SQL Server  
**Visualization:** Tableau, Power BI

## PROJECTS

<b>Dynamic Ad Ranking Optimization System</b>   <i>Python, TensorFlow, DSSM, Deep &amp; Wide</i>	<i>Nov 2023 – Feb 2024</i>
<ul style="list-style-type: none"><li>Formulated a dynamic ad ranking model combining DSSM and Deep &amp; Wide networks, increasing relevance scores by 22% and CTR by 15%</li><li>Integrated advanced sparse data techniques to capture user intent, yielding a 10% rise in conversion rates</li><li>Deployed the model with automated retraining pipelines, ensuring consistent performance and scalability on AWS</li></ul>	
<b>Custom Audience Segmentation &amp; Lookalike Modeling</b>   <i>Python, MXNet, SQL, Tableau</i>	<i>Jul 2023 – Oct 2023</i>
<ul style="list-style-type: none"><li>Developed a segmentation engine leveraging transfer learning and MXNet to identify custom audiences, improving targeting precision by 18%</li><li>Built a lookalike modeling pipeline using advanced clustering and deep embedding techniques to expand high-value user groups</li></ul>	