

Shreenek

Data Scientist and Machine Learning Engineer with over 5 years of experience working for Freelancing project for tech giants Amazon and Google, specializing in production-ready ML solutions. Expert in recommendation systems, NLP, embeddings, and distributed computing frameworks for processing medical imaging data (endoscopic video, laparoscopy, dental). Proven track record in developing scalable ML pipelines in cloud environments, particularly Azure and Databricks. Experienced in the pharmaceutical/technology sector with a strong background in biomedical applications.

TECHNICAL EXPERTISE

- **Machine Learning:** Recommendation Engines, Deep Learning, Embeddings, XAI (Explainable AI)
 - **Natural Language Processing:** BERT, Transformers, Sentiment Analysis, Topic Modeling
 - **Big Data Processing:** PySpark, Hadoop, Distributed Computing
 - **Cloud Platforms:** Azure ML, Databricks, AWS, GCP
 - **Languages & Frameworks:** Python, SQL, R, TensorFlow, PyTorch, Scikit-learn
 - **Data Visualization:** Power BI, Tableau, Matplotlib, Seaborn
 - **Development:** CI/CD, Git, Docker, Agile/Scrum
 - **Healthcare Data:** DICOM, HL7, FHIR, Anonymization Techniques, Medical Ontologies
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Experience

Senior Data Scientist | Stackfuel, Berlin, Germany | January 2022 – Present

- Architected and deployed a production-ready recommendation engine enhancing user engagement by 28%
- Implemented NLP and embedding models for content categorization, improving search relevance by 35%
- Developed distributed ML pipelines using PySpark for processing 10TB+ daily data
- Collaborated with cross-functional teams in an agile environment to deliver quarterly product updates
- Optimized machine learning models resulting in a 40% reduction in processing time
- Mentored junior data scientists and conducted technical workshops for team knowledge enhancement

NLP Engineer | HFU Berlin, Germany | June 2020 – November 2021

- Architected a distributed deep learning platform on Azure for analyzing laparoscopic surgical videos
- Developed custom embedding models for representing 3D dental scan data, improving treatment recommendation accuracy by 28%
- Created a real-time endoscopic video processing pipeline using PySpark and Azure Databricks
- Implemented computer vision algorithms for dental X-ray analysis with 89% diagnostic accuracy
- Built recommendation systems for personalized treatment plans based on medical imaging and patient history
- Designed ML pipelines for analyzing pharmaceutical microscopy data with distributed computing

ML Research Associate | India | May 2018 – August 2019

- Conducted research on deep learning applications for medical video processing
- Developed early prototypes for endoscopic anomaly detection systems using CNNs
- Created dental image segmentation models for identifying pathologies
- Implemented NLP solutions for analyzing clinical documentation
- Published papers on AI applications in minimally invasive surgery and dental imaging

Education

Biomedical and Data Science Engineering

Hochschule Furtwangen • Schwenningen , Baden-Württemberg
08/2022

Mechanical engineering minor Computer Science

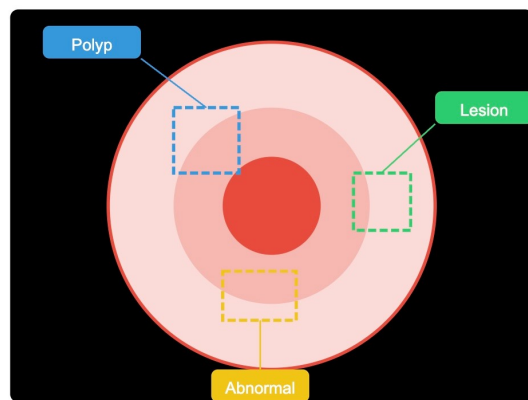
Sant Gadge Baba Amravati University • Amravati, Maharashtra
05/2017

Languages

English – C1/C2; German – B2/C1; Hindi, Marathi

Endoscopic/Laparoscopic AI Analysis System

Endoscopic Image Analysis Dashboard



Real-time Analysis Results

Objects Detected:

- Polyp (Confidence: 94.2%)
- Lesion (Confidence: 87.6%)

Classification:

- Benign polyp: 73.8%
- Precancerous: 22.4%
- Malignant: 3.8%

AI Recommendation

Biopsy recommended for further analysis of marked areas

Computer Vision

Deep Learning

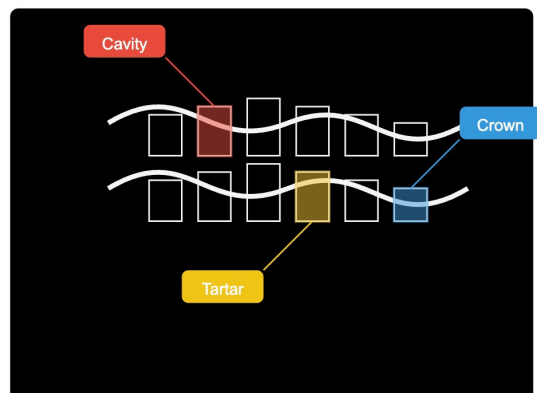
Azure ML

PySpark

Databricks

Dental AI Analysis System

Dental X-Ray Analysis Dashboard



AI Analysis Results

Detected Conditions:

- Cavity on Tooth #4 (Confidence: 96.3%)
- Tartar buildup on Tooth #29 (Confidence: 89.1%)
- Existing crown on Tooth #32 (Confidence: 99.7%)

Progression Analysis:

- Cavity on #4 increased by 28% since last visit
- New tartar formation detected on #29

Treatment Recommendations

Filling for #4, deep cleaning recommended

Comprehensive AI Analysis

● Requires urgent treatment ● Requires clean ● Previous work ● Healthy

Image Analysis

Deep Learning

Azure ML

PySpark

ML Recommendations