

SHIVA HARI GUNDETI

☎ (801) 634-8493 ✉ shivaharigundeti@gmail.com 🔗 [linkedin.com/in/gundetishivahari](https://www.linkedin.com/in/gundetishivahari) 📄 [shivaharisonu.github.io](https://github.com/shivaharisonu)

SUMMARY

Software Engineer with over 2 years of experience in Search and Data Platform teams. Proficient in Java, Python and Node.js with an expertise in building backend scalable systems and RESTful APIs. Researcher in the realm of machine learning, deep learning and NLP with an expertise in writing algorithms, training models and data preprocessing

TECHNICAL SKILLS

- **Programming:** Python, Java, C, C++, HTML/CSS, Javascript, SQL, Matlab
- **Machine Learning:** PyTorch, Numpy, Pandas, Tensorflow, Apache Spark, AWS SageMaker
- **Full Stack development:** Spring-Boot, Django, React, Typescript, Node.js, GIT, Docker, Kubernetes, CI/CD
- **Technologies:** Kafka, Flink, Neo4J, PostgreSQL, Elasticsearch, Cassandra, MongoDB, AWS S3, DynamoDB, Redis

RESEARCH EXPERIENCE

Student Research Assistant

[Feb'24 - Aug'24]

Seismograph stations, University of Utah

- Trained CNN and LSTM models to perform spectrogram classification and attained 95.8% accuracy
- Improved the robustness by implementing **SWAG** and achieved a 97.3% test accuracy on CNN architecture.
- Performed Multi-SWAG inference using ensemble of CNN, LeNet and PreResNet models.

PROFESSIONAL EXPERIENCE

Brane Enterprises

[Jan'23-June'23]

Software Development Engineer 2

- **AI Powered Search:-** Developed search application using Elasticsearch and captured user signals for analytics, personalized search, and recommendations. Used Neo4J by building Knowledge graphs for Semantic search
- **Data Ingestion and Processing:-** Built indexing service to create ETL pipelines using Kafka and Flink to process and stream data in real-time to Elasticsearch resulting in a 50% reduction in data latency and improved search performance
- **Technologies:-** Java, Spring-boot, Python, AWS S3, AWS Athena, Elasticsearch, Neo4J, Flink

Brane Enterprises

[April'21-Jan'23]

Software Development Engineer

- **Auditing and Metering:-** Implemented Aspect-Oriented Programming to enhance REST APIs with auditing and metering capabilities. Integrated AOP with 50+ microservices to track and audit user interactions and monitor API usage
- **Notifications:-** Implemented the Push-Notification which handles 10K notifications per day and also searching functionality.
- **Database Migrations:-** Performed various database migrations from AWS DYNAMODB to MONGODB, and from ELASTICSEARCH to MONGODB, etc., handling different schema changes with backward and forward compatibility.
- **Technologies:-** Java, Spring-boot, Apache Druid, Apache Kafka, MongoDB, DynamoDB

Chamber of Products

[April'20-June'20]

Software Development Engineer Intern

- Deployed and integrated Redis to reduce the latency of APIs. Used HashKey in Redis to store the volatile data
- Improved user login with Bearer token-based authentication and OAuth2-based authorization
- Implemented security features across services and data stores, including SSL and secret manager integration
- **Technologies:-** Java, Springboot, Redis, OAuth2.0

EDUCATION

University of Utah

Utah, USA

Master of Science in Computer Science - GPA: 3.95

[Aug'23-May'25]

Courses: Graduate Algorithms, Deep Learning, Computer Architecture, Natural Language Processing, Manage Data with Machine Learning, Machine Learning, Operating Systems

Indian Institute of Technology

Bhubaneswar, India

Bachelor of Technology - Electrical Engineering - GPA: 7.97

[Jul'17-May'21]

Related Courses: Software Engineering, Software Testing and Verification, Machine Learning and Data Analytics

PROJECTS UNDERTAKEN

Using Confidence for Localization prediction | CNN, Pytorch, ML, OpenCV

[Jan'24-April'24]

Guide Prof. Aditya Bhaskara, University of Utah

Independent Study

- Performed adversarial training on Image data to improve accuracy of out of domain detection by 10%
- Increased the accuracy of U-net CNN model by 22% by using Wasserstein distance loss function for localization.

Query Intelligence on E-Commerce Search | Apache Spark, Apache Solr, Docker

[Jan'24- April'24]

Manage Data with ML

Course Project

- Performed product ranking based on user clicks, handled misspelled inputs, and employed Learning-To-Rank ML algorithm to build generalisable search system. Used Spark for data preprocessing and Solr for searching purposes.

SCHOLASTIC ACHIEVEMENTS

- Ranked 27 in ACM Inter-collegiate Programming Contest(**ICPC**) Rocky Mountain Regional Contest [Nov'23]
- Ranked in the top 4 % among 0.2 million candidates in JEE Advanced 2017 [May'17]
- Ranked in the top 1 % among 1.5 million candidates in JEE Mains 2017 [April'17]