

Bhuvan Kumar Chennouju

bhuvankumarchennouju@gmail.com | 816-377-7628 | Kansas City, MO | [Portfolio](#) | [LinkedIn](#) | [Kaggle](#) | [Tableau](#)

PROFESSIONAL EXPERIENCE

Computational Intelligence and Bio-Identification Technologies Laboratory Kansas City, MO
Student Data Scientist August 2022 - Present

- A ResNet-based Human Authentication model is developed for finger vein patterns, achieving 99.9% $\pm 0.01\%$ AUC.
- GPU runtime was reduced by 2/3 with PyTorch to parallelize data processing and distributed model training.
- An ML-based Human Identification framework was created for fNIRS data with an accuracy of 0.96% $\pm 0.5\%$.
- Publications:
 1. "Analysis of fNIRS as a Biometric Modality" Bhuvan Ch, Keerti B, Mostafizur R, Reza D, IEEE 2023 International Joint Conference on Biometrics, Ljubljana, 25 -28 Sep'23 (Under Review).
 2. "A Secure and Privacy-Preserving Biometric Template Protection Technique" Keerti B, Bhuvan Ch, Mostafizur R, Reza D, IEEE 2023 International Joint Conference on Biometrics, Ljubljana, 25 -28 Sep'23 (Under Review).

T-Mobile USA Inc Overland Park, KS
Software Developer Intern May 2022 – August 2022

- A Smart Digital Twin application for Oculus with an NLP intent recognizer was developed using C# and Wit AI APIs.
- A Gesture Recognition system for VR input devices with 97% accuracy was built, which helped in controller usage by 10%.
- An image classifier was developed in collaboration with a cross-functional team for Modzy cloud deployment to test edge computing capabilities, resulting in a 5% reduction in model inference time.
- Presented data-driven results to senior leadership to save 25% of quarterly funds on VR input devices.

Spark Foundation Remote, IN
Data Scientist Intern October 2020 – December 2020

- Developed a student churn model for better than the predictions at 85% prediction accuracy.
- Developed and presented data visualizations and dashboards using Python, SQL, and Tableau.

Indian Institute of Technology, Bombay Mumbai, IN
Project Research Assistant May 2019 – September 2020

- A regression model was developed to predict the fuel droplet size, saving 500\$ per engine in testing and experimentation.
- Discovered five new combustion patterns in micro combustors, utilizing high-performance computing clusters to perform simulations and image processing with Python.
- Publications:
 1. "Novel flame dynamics in a rich mixture of premixed propane-air in a planar microcomputer," Bhuvan Ch et al., Physics of Fluids, Oct 6, 2020, <https://doi.org/10.1063/5.0020518>

EDUCATION

University of Missouri - Kansas City Kansas City, MO
Masters in Computer Science May 2023

- Graduate Teaching Assistant (Jan'22 - present) for Deep Learning, Machine Learning, & Introduction to Statistical Learning.
- Collaborated with the instructor to lead recitations, grade coursework, and answer 90+ students' questions.

National Institute of Technology, Hamirpur Hamirpur, IN
Bachelor of Technology in Engineering May 2018

PROJECTS AND LEADERSHIP

Dynamic Activity Predictions Using Graph-based Neural Networks for Time Series Forecasting Kansas City, MO
University of Missouri- Kansas City May 2022 –Present

- Developed a temporal graph network-based pipeline for time series forecasting with 90% efficiency in error metrics compared to traditional methods.
- Data visualizations of graphs and Dashboarding were created with Tableau.

Kaggle Master - Notebooks Remote
Kaggle Online Data Science Platform January 2020 – Present

- Published 10 data science projects to the Kaggle notebooks category as an open contribution.

ACHIEVEMENTS

- Won 1st & 3rd places in Hackathons organized for Fall 21 & 22.
- Kaggle Notebook Master with the best rank of 109 out of nearly 200K Kagglers
- **Coursera Certifications:** Applied Machine Learning, Deep Learning specialization, Data Visualizations with Python.

SKILLS

- **Programming Languages:** Python, R, C, C#, JavaScript, HTML, CSS, SQL
- **Big Data & Machine Learning:** Spark, Firebase, Python, PostgreSQL
- **Data Science & Miscellaneous Frameworks:** Machine Learning Algorithms, Deep learning, NLP, Transformers, CNNs, ETL, Pytorch, Pandas, Numpy, Tensorflow, Time Series Forecasting, Optimization, APIs, Git, Flask, Tableau, MS Excel, Google Cloud, SQL, AWS Sagemaker