JAGTAP VINAYAK G. M.

Ph.D. Computer Engineering (Thesis Submitted)

ME, BE Information Technology

+918087231632, vinayak5jagtap@gmail.com

 "Shrisiddhivinayak", Raygad Nagar, Beed-431122 Maharashtra India

https://scholar.google.co.in/citations?user=I_w0XbM AAAAJ&hl=en
https://in.linkedin.com/in/vinayakjagtap

Work Experience

Organization	Duration	Position
iKnowlation Research Labs Pvt. Ltd.	05/06/2015- Present	Data Scientist and Product Architect (Team Lead since 2020)
Anomaly Solutions Pvt. Ltd.	02/07/2012- 09/04/2013	Project Intern (ME Project)
EKLaT Research Labs	10/01/2011 – 04/06/2015	Software Engineer

Projects

Type	Name	Work	Technological Specification
Product	Kvinna (woman's health care product) (Duration: 2016 to present)	Design and development of machine learning module: Contextual Similar cases module; Risk classification and ranking module. Data preprocessing and handling, API designing for data exchange, testing, and analysis of text and non-text data	An incremental learning algorithm designed for determining context and finding out contextual similar cases. Data: gynacological, fertility care data Size: 10 K patients records Framework: Tensorflow
	Turning Point forecasting (Commodity price forecasting) (Duration: 2020 to present)	Design and development of machine learning module: turning point and shoulder are identification module; Price forecasting module. Data preprocessing and handling, API designing for data exchange, testing, and analysis of text and non-text data	Developed a new method for turning point forecasting using modified LSTM and differential. Data: Commodity data from government sites Size: 7 years of different commodity data Framework: TensorFlow, NeuCube
	Concepts (iKnowConcept) (Duration: 1 year)	Concept association platforms within domains like education, industry, etc. AI bots are designed to analyze text and associate concepts with it.	Designed a platform that allows users to contribute, associate, and validate novel concepts. Datasets: domain text data

			Framework: Bert, NLTK, TensorFlow, etc.
	Dot File (Duration: 9 months)	Secure file-sharing product for cross-platform and specific file sharing File types: Multimedia and documents files Permission type: read, modify and view	Designed algorithm for secure file sharing. Security level: person-specific, device-specific, network-specific, time-specific
Consultancy Projects	Siemens (Parking product) (Duration: 4 months)	Scope and complexity analysis for parking problem; understanding requirements and norms of the German government and providing solution based on it.	Finding out real-world coordinate and object detection from LIDAR data Data: LIDAR, Camera live streaming data Framework: OpenCV
	Adam-i (Competency index-based project management) (Duration: 6 months)	Machine learning modules development: Preprocessing, Data analysis, model building, competency matrix generation, etc.	Finding out an association between competency and project description Data: Project data and employee data Framework: NLTK, Google News Vector
	Metamagics (Health care product) (Duration: 4 months)	Drug-to-disease mapping and association module for their healthcare product	Finding out extracted treatment wot disease Data: medicine data and disease data. Framework: NLTK, Google News Vector, spacy, genism
	DST project with CMR Technical campus and iKnowlation Research Labs (Duration: 3 years)	Provided consultation for the DST project named Thematic trends analysis for Multimedia using context vector machine	Finding out an association between multimedia files Data: multimedia data Framework: NLTK, Google News Vector, Bert, Gensim, Spacy, OpenCV, Caffe

Skills

Programming Languages: C, Java. Python

Frameworks: Tensorflow, Keras, NeuCube, Caffe, Bert, OpenCV, Gensim, Spacy, Numpy, Pandas, Scikitlearn, Matplotlib, Seaborn, etc.

Databases: SQL, No- SQL

Cloud: Docker, Digital Ocean

Education

EXAM	YEAR	INSTITUTE	UNIVERSITY/BOARD	PERCENTAGE/CGPA
SSC	2004	Shri Shivaji Vidyalay, Beed	Maharashtra Board	82.66%
HSC	2006	Smt. K.S.K. College, Beed	Maharashtra Board	78.33%
BE IT	2006 - 2010	WCE, Sangli	Shivaji University, Kolhapur	64.36%
ME IT	2011- 2013	PICT, Pune	University of Pune	7.87/10
Ph.D. CE	2018 – (Thesis Submitted)	COEP, Pune	University of Pune (SPPU)	Thesis submitted

	ACADEMIC PROJECT/ RESEARCH DETAILS
BE IT	BE. Project: **Multimedia Steganography**; Hiding text in audio, video and images.
ME IT	ME. Project: **Instance-specific secure and optimum file sharing**; Time-specific, user-specific, device-specific and network-specific file sharing with options of read view and modify for text and binary files.
Ph.D. CE	Phd Research Work: **Uncertainty based Evolutionary Machine Learning for Gaming Applications**; Rule-based and pattern-based AI systems fail to understand uncertainty in the domain. Contextual uncertainty incubation in learning improves decision-making.

Publication List

Scopus Indexed Conferences

[1]. Jagtap, Vinayak, and Parag Kulkarni. "Contextual high-level uncertainty modeling reducing surprises in decision making." In 2019 IEEE International Conference on Electrical, Computer and Communication Technologies (ICECCT), pp. 1-4. IEEE, 2019.
[2]. Raju, Srujan, Vinayak Jagtap, Parag Kulkarni, M. Ravikanth, and Md Rafeeq. "Speech recognition to build context: A survey." In 2020 international conference on computer science, engineering and applications (ICCSEA), pp. 1-7. IEEE, 2020.
[3]. Jagtap, Vinayak, K. Srujan Raju, M. V. Rathnamma, and J. Sasi Kiran. "Efficient Lossy Audio Compression Using Vector Quantization (ELAC-VQ)." In Intelligent System Design: Proceedings of Intelligent System Design: INDIA 2019, pp. 407-415. Springer Singapore, 2021.
[4]. Srujan Raju, K., Vinayak Jagtap, Parag Kulkarni, and M. Varaprasad Rao. "Gameplay Cognitive Decision Support Using Statistical and Non-statistical Parametric Fusion." In Computer Communication, Networking and IoT: Proceedings of 5th ICICC 2021, Volume 2, pp. 187-193. Singapore: Springer Nature Singapore, 2022.

[5]. Raju, Srujan K., Vinayak G. Jagtap, and Parag A. Kulkarni. "Artificial Intelligence Enabled Smart Cities for Premises Security." Artificial Intelligence for Smart Cities and Villages: Advanced Technologies, Development, and Challenges (2022): 144.

Scopus Indexed Journals

[1]. Vinayak Jagtap, Raju Srujan, Parag Kulkarni, M. Ravikanth, and Md Rafeeq. " Image Recognition and Content Retrival to Build Context: A Survey." Journal of Advanced Research in Dynamical & Control Systems, 01- Special Issue, pp. 1656-1666.
[2]. Jagtap, Vinayak, Parag Kulkarni, and Pallavi Joshi. "Game Abstraction (GA) using temporal event similarity with uncertainty." Journal of Educational and Social Research 8 (2), pp. 97-110
[3]. Jagtap, Vinayak, Parag Kulkarni, and Pallavi Joshi. " Uncertainty based Feature Enhancement to Eliminate Data-driven Bias." Journal of Xidian University 16 (7), pp. 797-803

SCIE Journals

[1]. Jagtap, Vinayak, and Parag Kulkarni. "A bayesian network-based uncertainty modeling (BNUM) to analyze and predict next optimal moves in given game scenario." Int. Arab J. Inf. Technol. Volume 20, Number 02, (2023) pp. 199 - 205, doi: 10.34028/iajit/20/2/6
[2]. Jagtap, Vinayak, Parag Kulkarni, and Pallavi Joshi. "Uncertainty-based decision support system for gaming applications." Journal of Intelligent & Fuzzy Systems, Vol. 44, no. 2, (2023) pp. 3381-3397
[3]. AbouHassan, Iman, Nikola K. Kasabov, Vinayak Jagtap, and Parag Kulkarni. "Spiking neural networks for predictive and explainable modelling of multimodal streaming data with a case study on financial time series and online news." Sci Rep 13, 18367 (2023). https://doi.org/10.1038/s41598-023-42605-0
[4]. Jagtap, Vinayak, and Parag Kulkarni. "Turning Point Induced Knowledge Forecasting under Uncertainties (TrIK)." Int. Arab J. Inf. Technol. Volume 21, No. 2, March 2024.

Patents

[1]. "SYSTEM AND METHOD FOR THEMATIC CONTEXT-BASED DECISION SUPPORT USING MULTI-SENSORY MULTI-DIMENSIONAL INPUT DATA FUSION AND ASSOCIATION", KS RAJU, DP KULKARNI, V JAGTAP, A Prashanthi, IN Patent 481,527 (Granted) (2023)
[2]. "A SYSTEM AND METHOD FOR TURNING POINT BASED DECISION MAKING UNDER UNCERTAINTY", P KULKARNI, V JAGTAP, IN Patent 202324045395 (2023)

Other Journal Articles

[1]. Jagtap, V. G., and S. S. Pande. "Noisy Node Detection in Wave File by using Iterative Silhouette Clustering and Vivaldi." International Journal of Computer Applications 59, no. 4 (2012).
[2]. Jagtap, Vinayak, Sudhakar Reddy, and Pallavi Joshi. " Efficient Lossy Image Compression using Vector Quantization (ELIC-VQ)." CiiT International Journal of Digital Image Processing 10 (9), pp. 165-170.(2018)
[3]. Jagtap, Vinayak, Sachin Pande, and Parag Kulkarni. " Intelligent Silhouette Wave Steganography (I-SiWaS)." CiiT Artificial Intelligent Systems and Machine Learning 5 (1), pp. 13-19. (2013)
[4]. Velankar, Makarand, Vaibhav Khatavkar, Vinayak Jagtap, and Parag Kulkarni. "Knowledge discovery in time series data with contextual event identification." International Journal of Knowledge Engineering and Data Mining 7, no. 3-4 (2022): 252-270. (2022)
[5]. Velankar, Makarand, Vaibhav Khatavkar, Vinayak Jagtap, and Parag Kulkarni. " Role of Feature Engineering and Classifier Selection for Machine Learning Predictions." Journal of Computer Science Engineering and Software Testing 7 (3), pp. 10-17 (2021)

Achievements

- AFCEH certification, Oracle database certifications

- Visiting faculty: PICT, GHRIET, Amplify Mindware, Pune

- BOS and other committee members: WCE, Sangli, GHRIET, Pune

- Session Chair: ICC-DIS-2021 Conference

- Reviewer: Journal of Intelligent and Fuzzy Systems, Expert Systems

DECLARATION:

I hereby declare that the above stated information is true to the best of my knowledge.

Place: Pune

Date:

(Jagtap Vinayak)