

SUMMARY

Dedicated PhD graduate in Data Science, Machine Learning, and NLP from Tokyo Metropolitan University with a strong academic and volunteer background. Tech community ambassador and founder, proficient in Python, R, and AI frameworks. Published researcher with rich experience in project management with UI/UX design and software development skills. Multilingual in English, Hindi, and basic Japanese.

EDUCATION

- **Tokyo Metropolitan University** Tokyo, Japan
Doctor of Philosophy in Computer Science April 2021-Sep 2024
- **Chaudhary Ranbir Singh University** Jind, India
Master of Philosophy in Computer Science Aug 2015-April 2017
- **Maharishi Dayanand University** Rohtak, India
Masters of Science in Computer Science Aug 2013-May 2015
- **Maharishi Dayanand University** Rohtak, India
Bachelors of Science in Computer Science Aug 2010-May 2013

EXPERIENCE

- **MEXT Scholarship Association** Tokyo, Japan
Vice-Head of Finance Aug 2023 - Present
- **Forth Valley Concierge** Tokyo, Japan
Internship Jan 2023 - March 2023
- **Microsoft Student Learn** Tokyo, Japan
Ambassador/Founder at Tokyo Metropolitan University Jan 2022 - Present
- **Waffle** Tokyo, Japan
Technovation Challenge Mentor Dec 2021 - March 2022
- **Women Techmakers** Tokyo, Japan
Ambassador Sep 2021 - Present
- **Google Developer Student Club** Tokyo, Japan
GDSC Lead/Founder at Tokyo Metropolitan University Aug 2021 - Aug 2022
- **S.B.S.S** Jind, India
Product Supervisor Intern, Bio-Metric Devices and Applications Mar 2016 - Sep 2016
- **Chaudhary Ranbir Singh University** Jind, India
Teaching Assistant, Soft-Computing and Matlab Sep 2015 - Feb 2016

PROJECTS

- **IndusDraw:** Directed the aggregation and structuring of handwritten Indus Signs data from various users via a web-based platform, employing crowd-sourcing methodologies. Employed cutting-edge machine learning techniques to analyze the dataset, resulting in a substantial enhancement of prediction accuracy by up to 70% compared to the baseline data.
- **TMU-HUB:** Worked on a mobile application aimed at enhancing users' mental well-being and promoting engagement in real-world activities. Developed using Flutter, Google Cloud, and Firebase, the app facilitates monitoring and improvement of mental health while encouraging active participation in offline pursuits.
- **Eco-Compact:** Designed and implemented Eco-Compact, a mobile application promoting eco-conscious financial management. Leveraged Flutter and Microsoft Azure to create a sustainable solution for users to track expenses while prioritizing environmental responsibility.

- **M.Phil Dissertation:** Implemented a Deep Convolutional Neural Network (CNN) with DropBlock regularization to create an image classification model capable of accurately recognizing Japanese historical characters. Achieved a remarkable 97% accuracy, surpassing existing state-of-the-art results.

SKILLS

- **Programming:** Python, R, MATLAB, C, C++, SQL, HTML, CSS, Javascript
- **Libraries:** Tensorflow, PyTorch, Keras, Caffe, OpenCV, Scikit-Learn, Numpy, SciPy, Matplotlib, Pandas, NLTK, fastai
- **Others:** AWS, Git, Azure, Docker, Kubernetes, Anaconda, RStudio, SAAS, Tableau, Figma

PUBLICATIONS

- **Sujata Saini**, Hiroki Shibata, Yasufumi Takama, “*Construction of Handwritten Indus Signs Dataset Employing Social Approach*” Special Issue, JACIII: Journal of Advanced Computational Intelligence and Intelligent Informatics, Volume-2, Issue-1, Jan 2024, pp. 122-128.
- **Sujata Saini**, Hiroki Shibata, Yasufumi Takama, “*Toward Construction of Handwritten Indus Signs Dataset*” The 10th International Symposium on Computational Intelligence and Industrial Applications (ISCIIA2022) Sep.23-Sep.25, 2022, Beijing, China.
- **Sujata Saini**, Vishal Verma, “*Japanese Historical Character Recognition using Deep Convolutional Neural Network (DCNN) with DropBlock Regularization,*” International Journal of Recent Technology and Engineering, Volume-8, Issue-2, July 2019, pp. 3510-3515.

AWARDS AND SCHOLARSHIPS

- Japanese Government (Monbukagakusho: MEXT) University Recommendation Scholarship under Flexible Design Scientist Interfaculty Program (FDSIP); April 2021 - March 2024
- AutoML Fall School Scholarship; Nov 2021

CONFERENCE PRESENTATIONS

- Presented the research work in the “**CcS (Community-centric System) 2022**”, International Seminar organized by TMU.
- Research paper presented in the “**The 10th International Symposium on Computational Intelligence and Industrial Applications (ISCIIA2022)**” Beijing, China.

SEMINARS AND WORKSHOPS

- Eco-Compact project participation in the “**2023 IEEE WIE Climate Tech Big Idea Pitch**” Competition.
- Participated in the “**UX (User Experience) Workshop 2021, 2022, and 2023**” organized by Flexible Design Scientist Interfaculty Program (FDSIP), TMU.
- Participated in the “**Microsoft Imagine Cup 2023**” whose mission was to solve one or more of the United Nations 17 Sustainable Development Goals.
- Participated in the “**The 4th Japan SciCom Forum 2022 (JSF22)**” organized by Okinawa Institute of Technology OIST, Japan.
- Participated in the “**AutoML Fall School 2021**” organized by Leibniz Universität Hannover, University of Freiburg, and Ludwig Maximilian University of Munich from Nov 8th-12th 2021.
- Attended a “**Deep Learning Talk on Kuzushiji Dataset**” by Tarin Clanaut (P.hD., National Institute of Informatics) at Otemachi, Tokyo, Japan.
- Attended the 9th CODH Seminar on “**Computer Vision with Labeled Data**” at NII, Tokyo, Japan.

- Participated in two-day International workshop on “**Hybrid Soft Computing and Data Analytics**” held at Department of Computer Science, South Asian University, New Delhi, India.

RESEARCH VISITS

- **Kyocera Minatomirai research center** ; Yokohama, Japan
- **CyberAgent AI Lab** ; Tokyo, Japan
- **AWS Amazon Office** ; Tokyo, Japan
- **Google Headquarters** ; Tokyo, Japan

EXHIBITIONS VISITS

- **Kiyoji Otsuji and Kzushi Ooura Photography Archive** ; Musahino Art University Museum, Tokyo
- **Eye Tracking Informatics** ; Root K Contemporary Art Gallery, Tokyo
- **Interference: Light, Vibrations and Wave** ; Tokyu Plaza, Tokyo

VOLUNTEER ACTIVITIES

- **Volunteer, International English Camp for Junior High School students** ; Iwai, Chiba
- **Volunteer, Japan Science Foundation Summit 2023** ; Okinawa Institute of Technology, Japan
- **Volunteer, AAVAAHN’ 2018 (2nd National Institutes Students’ Meet)** ; JNU, India
- **Volunteer, Indian International Science Festival**; IIT Delhi, India

MOOC’S UNDERTAKEN

- **Cognitive AI Classes** ; IBM
- **Computer Vision NanoDegree** ; Udacity
- **Machine Learning Crash Course with TensorFlow APIs** ; Google
- **MicroMasters Program of Statistics and Data Science** ; MIT
- **Introduction to Digital Humanities** ; Harvard University, edX

CERTIFICATIONS

- Certification of **Generative AI on Google Cloud**; Google
- Certification of **Building Transformer-Based Natural Language Processing Applications**; Nvidia
- Certification of **WIE Climate Tech Big Idea Pitch Competition**; IEEE
- Certification of **Advanced Python Programming for Artificial Intelligence**; IFERP
- Certification of **AWS Machine Learning Foundations 2022**; Udacity
- Certification of **Accelerating Data Engineering Pipelines**; NVIDIA
- Certification of **Creative Data Visualization for Narrative Designs**; Domestika
- Certification of **Effective Data Visualization: Transform Information into Art**; Domestika
- Certification of **AWS Cloud Practitioner**; Amazon Web Services (AWS)
- Certification of **DLI Platform Course for Instructors**; NVIDIA
- Certification of **Flutter Puzzle Hack**; Google
- Certified Diploma in **Advanced Software Management**; ZAD Institutions

INVITED TALKS

- **Advanced Python Programming for Artificial Intelligence ; IFERP**

PROFESSIONAL MEMBERSHIPS

- **IEEE Student Membership**
- **IEEE Computational Intelligence Society**
- **IEEE Young Professionals**
- **IEEE Women in Engineering**
- **IEEE Communication Society**
- **NIPS (Neural Information Processing System)**
- **ODSC (Open Data Science Conference) Global**
- **COSEAL (Configuration and Selection of Algorithms)**

COMMUNITY MEMBERSHIPS

- **tinyML**
- **2d3d.ai**
- **CreativeTokyo**
- **Tokyo Python Society**
- **TAIT (Tokyo AI Talks)**
- **Machine Learning Tokyo**
- **MSA (MEXT Scholarship Association)**

HOBBIES

Cultural Dance, Playing Badminton, Yoga, Blogging and Reading Articles

LANGUAGES

English (Fluent), Hindi (Native), Japanese (N5), and German (Basic)

REFERENCES

- **Prof. Yasufumi Takama**, Takama Laboratory, TMU: ytakama@tmu.ac.jp
- **Dr. Shibata**, Takama Laboratory, TMU: hshibata@tmu.ac.jp