

RV College of Engineering[®]

AutonomousApproved by AICTEInstitution AffiliatedNew Delhito VisvesvarayaTechnologicalUniversity, Belagavi



RVCE-Boston Centre of Excellence (CoE) AI Research and Business Solutions

ACTIVITIES (Aug. 2022 – Apr. 2023)



CoE - Inaguaration

Go, change the world



Inauguration by Shri. Dev Tyagi, Co-Founder, Boston Ltd on 25th August 2022

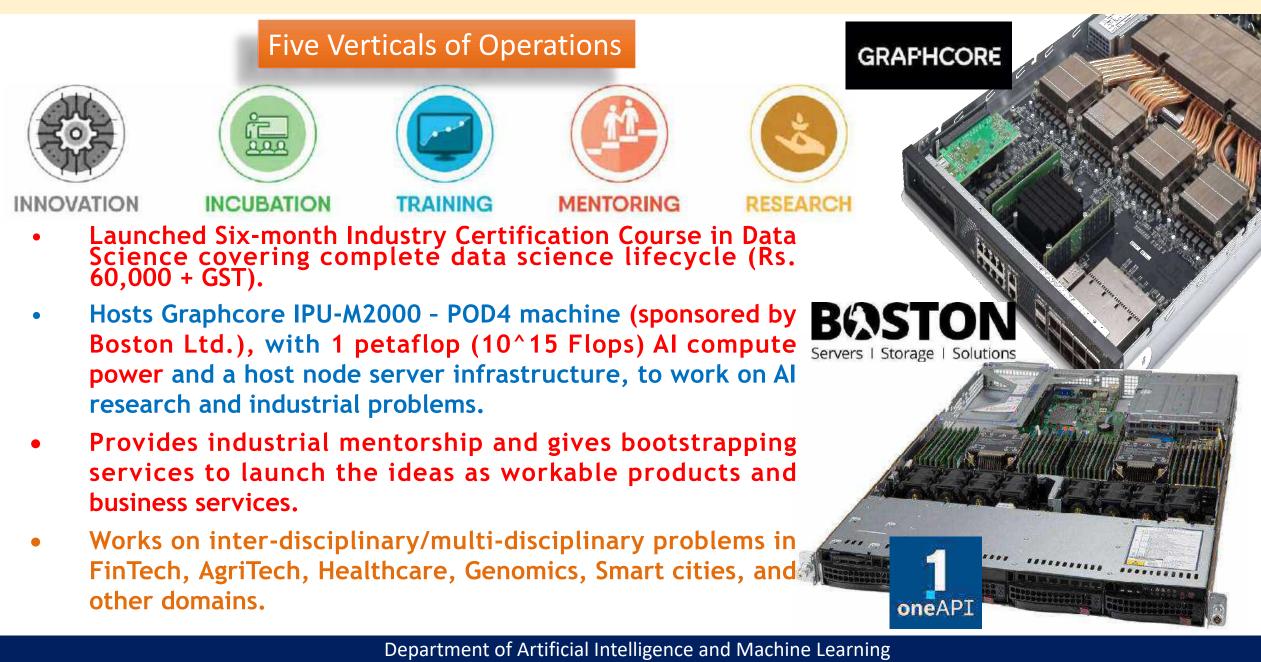






HoD's and Executives during the Inauguration

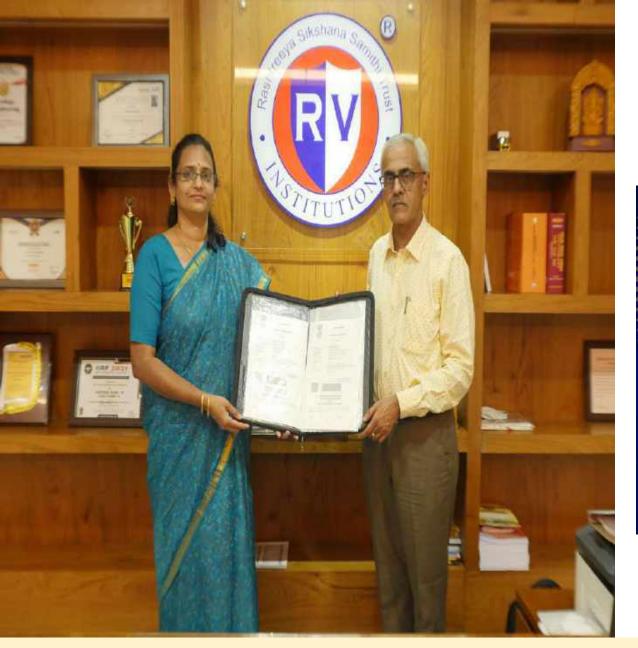
Boston-RVCE Centre for AI-Research and Business Solutions



Graphcore - Intelligence Processing Unit (IPU)

ML frameworks	TensorFlow, Keras, PyTorch, Pytorch Lightning, HuggingFace, PaddlePaddle, Halo, and ONNX
Deployment Options	Bare metal (Linux), VM (HyperV), containers (Docker)
Host-Links	RDMA based disaggregation between a host and IPU over 100Gbps RoCEv2 NIC, using the IPU over Fabric (IPUoF) protocol
	Host-to-IPU ratios supported: 1:16 up to 1:64
Graphcore Communication Library (GCL)	IPU-optimized communication and collective library integrated with the Poplar SDK stack
	Support all-reduce (sum, max), all-gather, reduce, broadcast
	Scale at near linear performance to 64k IPUs
PopVision	Visualization and analysis tools





Certificate Course in Data Science

For More Details Visit

https://rvce.edu.in//certificate-course-data-science

Contact Person

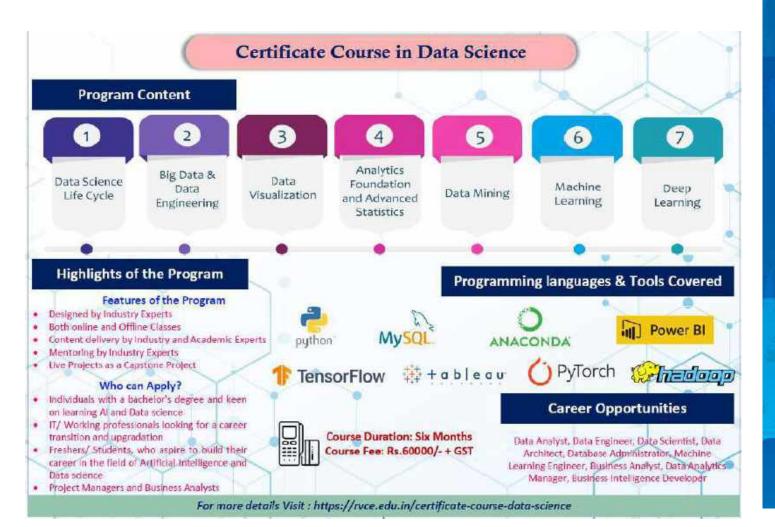
Dr. B. Sathish Babu - Professor and HoD, Dept. of AIML, RVCE Ph. 9844488329/ 9941124847 E-mail: hod.ai@rvce.edu.in, bta@bostonindia.in



BOSTON

Memorandum of Understanding (MoU) to Conduct Certification Course in Data Science – 20th May 2022

Flyers and Brochures



BOST@N TRAINING ACADEMY



ADMISSIONS ARE NOW OPEN CERTIFICATE IN DATA SCIENCE

LEARN FROM INDUSTRY EXPERTS & RVCE

RV College of Engineering (RVCE), Bengaluru, in association with industry partner Boston India Pvt.Ltd., developed a high-involvement career-oriented certification course in Data Science. The syllabus covers the complete life cycle of data science by using innovative teaching techniques and cutting edge technologies.

- Expected Outcome: Professional expertise in the Data Science field
- Target Audience: Working professionals & students interested in a career in Data Science
- Delivery Method: Live online classes on weekends, and 30% practical learning using Al tools on campus
- Aim: Solve real-time use cases in capstone projects using industry data

LAUNCH DATE: 06[™] AUGUST 2022 CERTIFICATION: JOINT CERTIFICATION WITH INDUSTRY DURATION: SIX MONTHS COURSE FEE: ₹ 60,000/- + GST

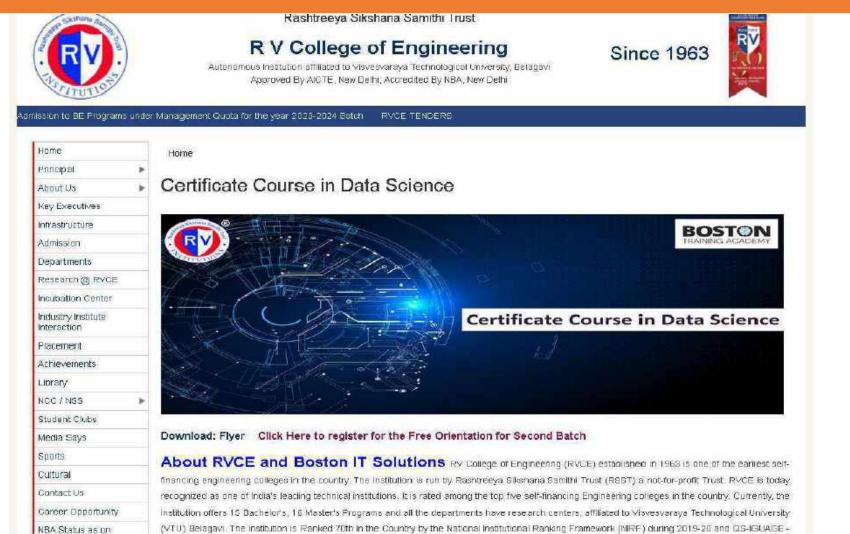
Please visit for all course information: https://wce.edu.in//certificate-course-data-science

FOR MORE DETAILS, CONTACT:

Dr. B. Sathish Babu - Professor and HOD, Dept. of AIML, RVCE, Bengaluru - 90 +91 98 4448 8329 | hod.ai@rvce.edu.in | www.rvce.edu.in +91 63 8274 9056/99 4112 4847 | bta@bostonindia.in | www.bostonindia.in

Data Science webpage hosted on RVCE website

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DIAMUND University Rading (2021-2024). Most or the UG programs and eligible M. Tech. & MCA programs have been accredited by NBA multiple times.



POR MORE DETAILS, CONTACT: Dr. B. Sathish Babu-Professor and HOD, Dept. of AIML, RVCE, Bengaluru - 90 P: +91 98 4448 8329 | E: hod.ai@rvce.edu.in | W: www.rvce.edu.in P: +91 63 8274 9056 / 99 4112 4847 | E: bta@bostonindia.in | W: www.bostonindia.in Please visit: https://rvce.edu.in//certificate-course-data-science

BOSTON TRAINING ACADEMY



ADMISSIONS OPEN BATCH 2

CERTIFICATE IN DATA SCIENCE

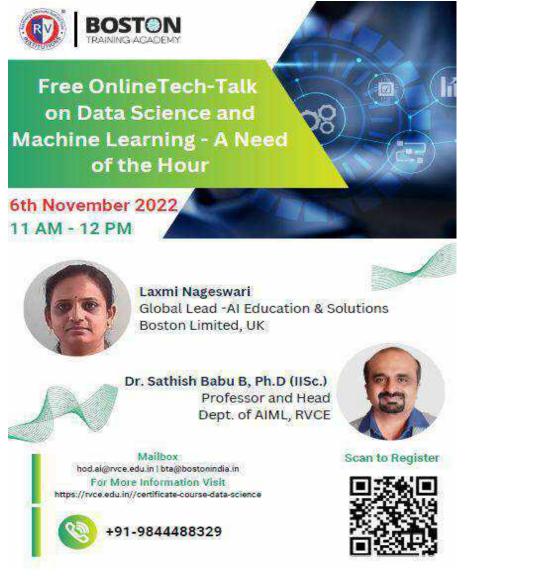
ORIENTATION DATE: 30TH OCTOBER 2022

Successful rolling of batch 1

- 100% On campus classes option
- Real time capstone projects

Get Certified

Course Start Date: 26th November 2022 Duration: 6 months | Course Fees: ₹ 60,000/-For Details Contact: hod.ai@rvce.edu.in/bta@bostonindia.in





For Detials Contact: hod.ai@rvce.edu.in | bta@bostonindia.in

ANANDA SOCIAL & EDUCATION TRUST **M R AMBEDKAR DENTAL COLLEGE & HOSPITAL**

IQAC INITIATIVE IN ASSOCIATION WITH DEPARTMENT OF DENTAL EDUCATION

FUTURE'S DENTISTRY APPLICATION OF ARTIFICAL INTELLIGENCE IN DENTISTRY **TUESDAY, OCTOBER 18 2022**

RESOURCE PERSONS





10AM - 3 PM

AUDITORIUM



M R Ambedkar Dental College

Students and **Faculty of Dental** College

18/10/2022



Department Of Mechanical, RR Institute Of Technology, Medaralli, Chikkabanavara, Bengaluru, Karnataka 560090, India Lat 13.070911° Long 77.510563° 23/01/23 12:21 PM GMT +05:30 RR Institute of Technology

Students and Faculty of Business Administration

23/01/2023

Certificate Course in Data Science – Batch #1 (Aug. 2022 – Mar. 2023)



Harish Rajanna Astom Transport India Ltd



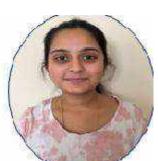
Dr. P. Bhanumathi, Assoc. Professor, RIM



Arun Kumar, Saint Gobain India pvt limited



Vinayak S Joshi Oracle



Bhoomika Nagesh Heraizen technologies



Jayashree, Asst. Professor, CIT



Naveen M K COMVIVA



Soumya S, Asst. Prof. BNMIT



Rahul Arya Samartha Infosolution



Varalaksmi B D, Asst. Professor, AIT

Certificate Course in Data Science – Batch #2 (Feb. 2023 – Aug. 2023)



Yuktha T D Graduate



K B Chidananda Alstom Transport India Ltd



Radhika Honnatti Graduate



Bhaavana S Graduate



Rahul Roy Graduate



Shivalingappa Graduate

Number of Students registered: 16

Two Days Workshop on Fundamentals of Deep Learning Models with Accelerated Computing–9th-10th Mar. 2023



Students and Faculty of RVCE Number of Participants: 27

Intel OneAPI and IPU Workshop – 31/03/2023



Heads of Departments and Faculty of Computer Science, Information Science, Artificial Intelligence, Data Science, Cyber Security, and other IT and Circuit Branches.

You are invited for a half-day industry workshop at RV College of Engineering Campus and get an experience of working with Intel oneAPI Toolkit.

-Coverage of the workshop:-

Intel® oneAPI Toolkit has marked a new era of heterogeneous and accelerated computing. All industries are moving towards building and deploying intelligent and automated business applications by integrating trusted and reliable practices. It is the time to augment your skills on accelerated computing platforms with the growing popularity of IoT. Big Data, Data Science, and Artificial Intelligence (Al).

Key Takeaways:

Live experience on using Intel[®] oneAPI Toolkits.

Knowledge of building large-scale and real-time applications with intel[®] oneAPI.





Faculty from Various Engineering Colleges in Bangalore Number of Participants: 25

2021 Batch Students 3-Weeks Internship conducted at CoE (21/11/2022 – 10/12/2022)

Technical skills

Python - Data analysis: Numpy, Pandas, Matplotlib, Seaborn Python - Machine Learning: Sklearn Python - Deep Learning: CNN models and RNN models Python - Natural Language Processing: NLTK, SPACY

• Modules and Problems

M1: Intent Analysis

- 1. Chat bot for collecting medical data by interrogation
- 2. Medical Data Summarization
- 3. Pesticides recommender system
- 4. Fake news identification

M2: Security Analysis

- 1. Secure voice assistant device
- 2. Identifying malicious behaviours
- 3. Information monitoring for sensitivity analysis
- 4. Malware and Spyware detection
- 5. Network Intrusion Detection
- 6. Building prediction models using cognitive computing
- 7. Crime hotspots identification

M3: Process Analysis

- 1. Business Decision Process Analysis
- 2. Inventory Workflow Analysis
- 3. Academic Process Analysis
- 4. Product Quality Analysis
- 5. ML-based quality testing
- 6. Shop-floor optimization
- 7. Machine breakdown prediction

M4: Business Analysis

- 1. Customer Churn analysis
- 2. Recommendation Solutions for Food-Tech and Edu-Tech companies
- 3. Crop-insurance estimators
- 4. Price Optimization analysis
- 5. Stock Market Data Analysis

M5: Deep Learning/Reinforcement learning Applications

- 1. Predicting audio/text sequence
- 2. Child growth prediction
- 3. Crop health analysis and disease identification
- 4. Implant condition predictions
- 5. Automatic annotation of spatial data
- 6. Hidden pattern identification in genomics data
- 7. Civil structures health analysis
- 8. Driver Drowsiness Detection
- 9. Image Caption Generator/annotations
- Number of Students registered: 62
 - Branches: AS, AI, EC, CS, ET, CH
 - Number of projects guided: 14



Industrial Interaction

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 Company - BullWork Mobility Duration of the Project - 20 weeks • Title of the work - DL model for Plant Health Monitoring •Funding: Rs.3,00,000/-•Faculty (AIML Dept.): • Dr. B. Sathish Babu Dr. Vijayalakshmi M N Prof. Narasimha Swamy • Students (AIML Dept.): Subhash Gupta • OM Mangalgi







Industrial Interaction

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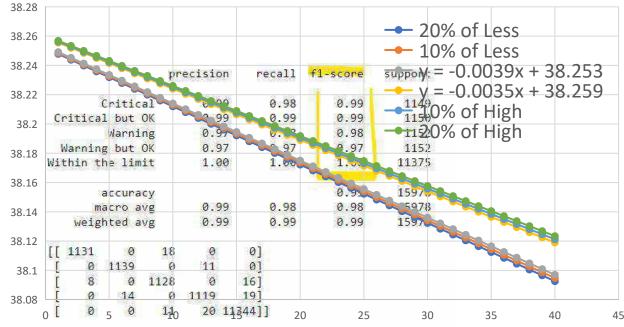
•Company - Toyota Industries Engine India Pvt. Ltd.

•Duration of the Project - 12 Months (Completed)

- •Title of the work Implementation Of Machine Learning Solution for GD Engines drilling operation
- •Funding: Rs.1,56,000/-
- •Faculty :
 - •Dr. B. Sathish Babu (PI-AIML)
 - •Dr. Sridhar (Mech.)
 - •Dr. Gangadhar (Mech.)
- Students:
 - Ajay Brightson (III Sem. AIML)
 - Hrithik (V Sem. CSE)









Industrial Interaction

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Company - Saint-Gobain Gyproc
Duration of the Project - 02 Months
Title of the work - Implementation of Machine Learning Solution for predicting moisture correction factor

- •Funding: Joint research project
- •Faculty :
 - •Dr. B. Sathish Babu
- •Students:
 - Arun Kumar (Saint-Gobain Gyproc)
 - •Ajay Brightson (III Sem. AIML)
 - Swarna A N (III Sem. AIML)

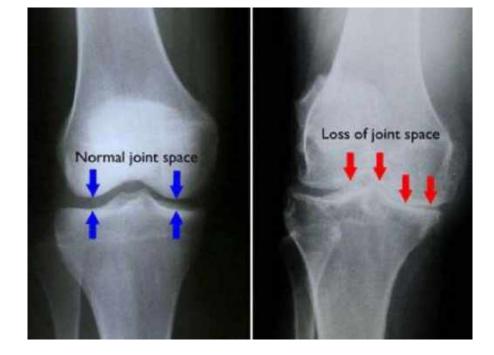






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- Group Name Medical Image Processing
 Title of the work Implementation Of Deep Learning based segmentation for knee osteoarthritis
- •Type of work: Research
- •Faculty:
 - •Dr. B. Sathish Babu
 - •Mrs. Revathi S A (Research Scholar)
- Students (III Sem. AIML):
 - Shivaprasad
 - Mohammad Ali
 - Naveen
 - Kumar Aryan
 - Ganeshprasad





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 Group Name - Natural Language Processing
 Title of the work - Document Classification using NLP and Deep Learning

• Type of work: Research

•Faculty :

- •Dr. Vijayalakshmi M N
- Students (III Sem. AIML):
 - •Dheeraj Anna
 - Abhishek N D
 - •Akhil Reddy
 - •Ajay Brightson
 - •Yagna Kalp

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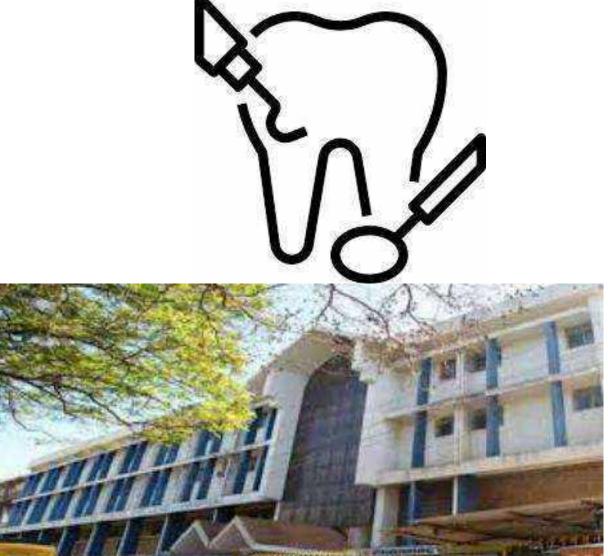
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- Group Name Al in Dentistry
- Collaborating Institute: M R Ambedkar Dental College, Bangalore

•Area: Application of DL models in dentistry, training and consultancy, joint research

• Faculty:

- Dr. B. Sathish Babu
- Prof. Somesh Nandi
- •Students (III Sem. AIML):
 - Prajwal
 - Sakshi Bagali
 - Ajay Brightson
 - Naveen
 - Mohammad Ali
 - Shivaprasad





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- Group Name E-Mobility Supply Chain Management
- •Areas of work: Demand forecasting, inventory management and supplier selection
- Faculty:
 - Dr. K N Subramanya
 - Dr. B. Sathish Babu
- •Students (III Sem. AIML):
 - Mohammad Ali
 - Dheeraj Anna
 - Karthik Sai (VIII Sem. Mech)
 - Akshay Alva
 - Aayaan Hasnain
 - Ayush Goyal
 - Anagha Casaba



