

NISHIT PAREKH

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EDUCATION

University of Massachusetts Amherst

Masters in Science, Computer Science

- Cumulative GPA: 4.00/4.00
- Expected Graduation: May 2018

Indian Institute of Technology, Jodhpur

Bachelor of Technology, Computer Science and Engineering

- Cumulative GPA: 9.41/10.00
- Ranked 2nd in a class of 42 students

RELEVANT COURSES

Machine Intelligence

Computer Vision, Applied Information Retrieval, Recommender Systems, Digital Image Processing, Pattern Recognition, Artificial Intelligence

Computer Science

Algorithms & Data Structures, Operating Systems, Database Systems, Distributed Systems, Computer Networks, Software Engineering, Compilers

SKILLS

Programming Languages

C++, Java, C, Python

ML/PR Tools

OpenCV, Olena, NLTK, CoreNLP

Statistical Tools

Matlab, Octave

Version Control

Git

AWARDS

Runner Up: LatentView Analytics Competition (Based on NLP for Book Reviews)

Sep 2014

Winner: IIT Jodhpur AI Challenge (Based on Ultimate Tic-Tac-Toe)

Oct 2013

RESEARCH EXPERIENCE

Laboratoire de Recherche et Développement de l'EPITA (Paris, France)

May - Jul 2015

Morphology in Color Images

- Improved text segmentation methods by extending grayscale functions into color domain.
- Enhanced segmentation of characters on difficult backgrounds like windows and metallic objects.

INDUSTRY EXPERIENCE

Mastek Incorporated (Mumbai, India)

May - Jul 2014

Virtual Dimensioning

- Implemented a pseudo-stereo vision system to measure dimensions of objects using a cell phone camera.
- Achieved a Measurement accuracy of 95% for near objects and 90% for distant objects.

Suspicious Sentiment Analyser

- Built a sentiment analyser to detect suspicious activity from social media data.
- Combined Stanford CoreNLP backend software with BRAT Rapid Annotation Tool for frontend.

ACADEMIC PROJECTS

Activity Recognition in Sports Video (Course Project - Computer Vision)

Sep - Dec 2016

- Built an SVM-based classifier to recognise player activity in videos of Volleyball matches.
- Achieved a classification accuracy of 82% by incorporating context-dependent 3-D position features.

Resource Allocation for Datacenter Frameworks (Final Year project)

Jul 2015 – May 2016

- Improved upon method proposed in [Chen'14, INFOCOMM] to allocate resources in datacenter networks.
- Extended optimal resource allocation to scenarios of multiple server failures and dynamic task addition.

Interactive Curves Explorer (Course Project - Computer Graphics)

Jul - Nov 2016

- Developed an interactive Bezier Curve and B-Spline Curve tool for educational purposes.
- Programmed with OpenGL libraries in C++, to aid students in understanding mid-level graphics code.

Library Book Sharing Application (Course Project - Computer Networks)

Jan - May 2015

- Developed a simple book-sharing application to enable library users to exchange material virtually.
- Used AVL trees to build the database, and a P2P client in Python for user interaction.

Virtual Memory Management Simulation (Course Project - Operating Systems)

Jan - May 2015

- Developed a simulator to analyse various memory page replacement techniques.

Nobel Laureate Information Extraction (Course Project - Artificial Intelligence)

Jul - Nov 2014

- Proposed semantic networks to extract information from Nobel Laureate Wikipedia pages.
- Theorised use of Named Entity Recognition (NER) to perform query analysis.