Sarthak Parui

Indian Institute of Technology Madras

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EDUCATION

Program	Institution	%/CGPA	Year of completion
MS in CSE	Indian Institute of Technology Madras, Chennai	9.33	2012-Present
B Tech in CSE	Institute of Engineering & Management, Kolkata	8.84	2010
XII	West Bengal Council of Higher Secondary Education	90.8	2006
X	West Bengal Board of Secondary Education	90	2004

SCHOLASTIC ACHIEVEMENT

• Secured All India Rank 1 in Joint Entrance Screening Test (JEST), 2012

SKILLS

• Languages : C, C++, Core Java, Python, Matlab

• Mobile/Web/DB Technologies : Android, Web Services, PHP, JavaScript, MySql

• Platform/Frameworks : Linux, OpenCV, WebGL

PROJECTS

Large Scale Sketch-based Image Retrieval

(February 2013 - ongoing)

- Designed and developed a real time efficient solution for image retrieval from a database of million images which significantly outperforms existing state-of-the-art methods
- Intelligent Adaptive Video Monitoring and Recording System

(March 2014 - ongoing)

- o This is a project funded by Department of Information Technology, Govt. of India. I Lead the Background Subtraction module for detecting the moving foreground objects
- Mobile app for Gaze Detection and Tracking

(April 2013-May 2013)

- O Developed an application that detects users' gaze and intelligently delivers targeted articles/products/ads. Source: https://github.com/sarthakparui/eyeintention
- o Won Judges' Choice Award in Yahoo HackU! 2013 and Ebay/Paypal Hackathon 2014 held at IIT Madras
- Augmented Reality application for Kinect

(April 2014 – July 2014)

- o Developed a Virtual Dressing application tackling various computer vision challenges, viz. scale and translation invariance, occlusion etc.
- Nominated as top 5 in Microsoft Hackathon-IIT Madras 2014
- WebGL and HTML5 based Game

(June 2011 – July 2011)

- o Techniques/Frameworks used: WebGL, HTML5, C3DL. Source: https://github.com/sarthakparui/typomania
- Project on Operating System

(August 2009 – April 2010)

- O Developed both 16-bit real and 32-bit protected mode small scale CUI based Operating System. Source: https://github.com/sarthakparui/opos
- Semi-supervised Learning for Saliency Detection in Images

(August 2012 – November 2012)

- o Proposed a method that detects the most Salient Foreground Object(s) in various challenging scenarios
- Website Designing (September 2009 August 2010)
 - Designed a part of the website for Institute of Engineering & Management, Kolkata (http://iem.edu.in/)

PUBLICATIONS

- Sarthak Parui and Anurag Mittal: "Similarity-invariant Sketch-based Image Retrieval in Large Databases", European Conference on Computer Vision (ECCV), 2014
- Samir Kumar Bandyopadhyay and Sarthak Parui: "A Method for Public Key Method of Steganography", International Journal of Computer Applications (IJCA), September, 2010



CO-CURRICULAR ACTIVITIES

- Ranked 18th in the South-Asia region qualifier of ACM International Collegiate Programming Contest, Asia Amritapuri site in 2009
- Ranked 2nd in Reverse Coding competition held at Shaastra 2013, annual technical fest of IIT Madras
- Ranked 1st in the Programming Contest 2009 at Infosys Aspiration 2020 among all teams from West Bengal
- Ranked 2nd in coding competition held at Aarohan 2009 and 2010, annual technical fest of NIT Durgapur
- Participated and won many other programming competitions
- Received outstanding Teaching Assistant award for Computational Engineering Course, 2013

PROFESSIONAL EXPERIENCE

- Worked as an Assistant System Engineer at Tata Consultancy Services, Hyderabad (September 2010 June 2012)
 - o Principal responsibilities include problem analysis and development
 - Worked on designing Server Side Architecture and data-flow and developing RESTful SOA for Maintenance Ticketing System – a product of TCS for workflow management on mobile platform
 - o Worked on Blackberry, Android and HTML5-based mobile app development

COURSE WORK

- Advanced Data Structure and Algorithms
- Pattern Recognition
- Computer Vision

- Kernel Methods for Pattern Analysis
- Digital Video Processing

EXTRA-CURRICULAR ACTIVITIES

- 1st in intra-college chess tournament in 2007 at IEM, Kolkata
- 2nd in NIIT Edgeineers "Parallel Chess with Viswanathan Anand" competition in 2007
- Chief coordinator of an inter-college coding competition organized in 2009 at IEM, Kolkata

OBJECTIVE

I have a strong inclination towards designing optimized, scalable solutions using mathematical theory and algorithmic approaches. I am passionate about new technologies and love to implement the acquired knowledge efficiently and robustly. I am looking forward to enhance my knowledge of effective and efficient scalable product development.