Aneeshan Sain $\qquad$ *Curriculum vitae*

CONTACT INFORMATION	Room 03-BB-00, Alan Turing Building, CVSSP	[My Homepage](#)
	University of Surrey, Guildford, Surrey	a.sain@surrey.ac.uk
	United Kingdom, Postal code: GU2 7XH.	saneeshan95@gmail.com

RESEARCH INTERESTS $\qquad$ Computer Vision, Deep Learning, Sketch Analysis

EDUCATION

University of Surrey, UK $\hfill$ since Oct 2019

- Centre for Vision, Speech and Signal Processing (CVSSP)
- Department of Electrical and Electronic Engineering
- Faculty of Engineering and Physical Sciences
- Current Status: Postgraduate Research Student

Institute of Engineering & Management, Kolkata (India) $\hfill$ 2017
University: Maulana Abul Kalam Azad University of Technology
Formerly known as West Bengal University of Technology

- Department of Electrical Engineering
- DGPA: 8.14/10 (Including all 8 Semesters)
- Current Status: Graduated with Bachelor of Technology in Electrical Engineering
- B.Tech Thesis: *'Intelligent Battery Management System'*

St. Xaviers Collegiate School, Kolkata (India) $\hfill$ 2013
- Indian School Certificate(12th Standard or A-level)
- Aggregrate: 94.3%

St. Xaviers Collegiate School, Kolkata (India) $\hfill$ 2011
- Indian Certificate for Secondary Education (10th Standard or O-level)
- Aggregrate: 95.2%

RESEARCH EXPERIENCES

University of Surrey, UK $\hfill$ since Oct 2019
- PhD Student
- Under: Prof. Yi-Zhe Song and Prof. Tao Xiang

Indian Statistical Institute (ISI), Kolkata, India $\hfill$ Feb 2016 - Dec 2017
- Research Intern
- Under Prof. Umapada Pal and Dr. Partha Pratim Roy

Indian Institute of Technology Roorkee (IITR), India $\hfill$ Dec 2015 - Jan 2016
- Undergraduate Student Researcher
- Under Dr. Partha Pratim Roy

TECHNICAL SKILLS

- Programming Languages: C, MATLAB, Python, JAVA, JCL, COBOL.
- Low level Programming : Atmel AVR (Atmega32) & 8085 Assembly, HLA.
- ML/DL Framework: Pytorch (Proficient).
- Hardware Exposure: AVR Micro-controller, Arduino.
- Mathematics: Linear-algebra, Probability, Statistics, Calculus.
- Web: Basics of HTML and CSS.
- Miscellaneous: LATEX, Version control (Git), OpenCV.

1. Text is Text, No Matter What: Unifying Text Recognition using Knowledge Distillation.
   Ayan Kumar Bhunia, **Aneeshan Sain**, Pinaki Nath Chowdhury, Yi-Zhe Song.
   IEEE International Conference on Computer Vision (**ICCV**), **2021**.

2. Towards the Unseen: Iterative Text Recognition by Distilling from Errors.
   Ayan Kumar Bhunia, Pinaki Nath Chowdhury, **Aneeshan Sain**, Yi-Zhe Song.
   IEEE International Conference on Computer Vision (**ICCV**), **2021**.

3. Joint Visual Semantic Reasoning: Multi-Stage Decoder for Text Recognition.
   Ayan Kumar Bhunia, **Aneeshan Sain**, Amandeep Kumar, Shuvozit Ghose, Pinaki Nath Chowdhury, Yi-Zhe Song.
   IEEE International Conference on Computer Vision (**ICCV**), **2021**.

4. StyleMeUp: Towards Style-Agnostic Sketch-Based Image Retrieval.
   Aneeshan Sain, Ayan Kumar Bhunia, Yongxin Yang, Tao Xiang, Yi-Zhe Song.
   IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), **2021**.

5. PQA: Perceptual Question Answering.
   Yonggang Qi, Kai Zhang, **Aneeshan Sain**, Yi-Zhe Song.
   IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), **2021**.

6. More Photos are All You Need: Semi-Supervised Learning for Fine-Grained Sketch Based Image Retrieval.
   Ayan Kumar Bhunia, Pinaki Nath Chowdhury, **Aneeshan Sain**, Yongxin Yang, Tao Xiang, Yi-Zhe Song.
   IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), **2021**.

7. MetaHTR: Towards Writer-Adaptive Handwritten Text Recognition.
   Ayan Kumar Bhunia, Shuvozit Ghose, Amandeep Kumar, Pinaki Nath Chowdhury, **Aneeshan Sain**, Yi-Zhe Song.
   IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), **2021**.

8. S^{3}Net:Graph Representational Network For Sketch Recognition.
   Lan Yang, **Aneeshan Sain**, Linpeng Li, Yonggang Qi, Honggang Zhang, Yi-Zhe Song.
   International Conference on Multimedia & Expo (**ICME**), **2020**.

9. Cross-Modal Hierarchical Modelling for Fine-Grained Sketch Based Image Retrieval.
   Aneeshan Sain, Ayan Kumar Bhunia, Yongxin Yang, Tao Xiang, Yi-Zhe Song.
   British Machine Vision Conference (**BMVC**), **2020 [Oral]**.

10. Zone-based keyword spotting in Bangla and Devanagari documents.
    Ayan Kumar Bhunia, Partha Pratim Roy, **Aneeshan Sain**, Umapada Pal.
    Multimedia Tools and Applications, Springer US, **2020**.

11. Improving Document Binarization via Adversarial Noise-Texture Augmentation.
    Ankan Kumar Bhunia, Ayan Kumar Bhunia, **Aneeshan Sain**, Partha Pratim Roy.
    International Conference on Image Processing (**ICIP**), IEEE **2019**.

12. Background Subtraction based on Integration of Alternative Cues in Freely Moving Camera.
    Chenqiu Zhao, **Aneeshan Sain**, Ying Qu, Yongxin Ge, Haibo Hu.
    IEEE Transactions on Circuits and Systems for Video Technology (**TCSVT**), **2019**.

13. Indic Handwritten Script Identification using Offline-Online Multimodal Deep Network.
    Ayan Kumar Bhunia, Subham Mukherjee, **Aneeshan Sain**, Ankan Kumar Bhunia,
    Partha Pratim Roy, Umapada Pal.
    Information Fusion, Elsevier, **2018**.

14. Multi-Oriented Text Detection and Verification in Video Frames and Scene Images.
    Aneeshan Sain, Ayan Kumar Bhunia, Partha Pratim Roy, Umapada Pal.
    Neurocomputing, Elsevier, **2018**.

PROFESSIONAL EXPERIENCE	Organisation	: Cognizant Technological Solutions
	Job Title	: Programmer Analyst
	Role	: Mainframe Developer
	Technology Used	: JCL, COBOL, Assembly Language (HLA)
	Duration	: Dec 2017 to Sep 2019

REFERENCES   Will be provided upon request.