# **Pinaki Nath Chowdhury**

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github.com/pinakinathc

http://www.pinakinathc.me



#### **Education**

2020 – Present

■ SketchX Lab of Center for Vision, Speech and Signal Processing University of Surrey, United Kingdom.

Doctor of Philosophy (Ph.D)

Supervisors: Prof. Yi-Zhe Song and Prof. Tao Xiang

2014 - 2018

■ Kalyani Government Engineering College, Kalyani (India) University: Maulana Abul Kalam Azad University of Technology Formerly known as West Bengal University of Technology Computer Science and Engineering DGPA: 8.33/10 (Including all 8 semesters) Graduated with Bachelor of Technology (Honors)

B.Tech Thesis: Analysis and Comparison of Natural Shapes.

## **Employment History**

June 2021 – August 2021

■ Tech Intern PhD Adobe Systems Europe Limited. Project Title: Sketch-Based Multiview Garment Modeling. Guide: Tuanfeng Wang, Duygu Ceylan, Yulia Gryaditskaya, Yi-Zhe Song. Mgr.: Niloy Mitra

June 2018 – September 2020

■ Project Linked Person. Indian Statistical Institute, Kolkata. Working on problems related to computer vision and machine learning. Guide: Prof. Umapada Pal (Head and Professor, CVPR Unit ISI Kolkata).

May 2018 – June 2018

■ Full Stack Developer Egnify Technologies, Hyderabad. Use MERN stack and GraphQL for building and integrating several microservices.

February 2018 – April 2018

■ Full Stack Developer intern. MyAnatomy Integrations, Bangalore. Use MERN stack to create microservices. Built the payment gateway service.

August 2017 – February 2018

Research Intern. CSIR - Central Drug Research Institute, Lucknow. Analysing awareness of various disease using web scrapping and machine learning for text classification. Guide: Dr. Sukant Khuranna.

October 2016 - March 2017

■ Python Developer intern. EduGorilla Community, Lucknow Web Scrapping and integrating several APIs for validation of data.

### **Selected Publications**

- \*Qi, Y., \*Su, G., Chowdhury, P. N., Li, M. & Song, Y.-Z. (2021). Sketchlattice: Latticed representation for sketch manipulation. In IEEE International Conference on Computer Vision (ICCV), 2021.
- Bhunia, A. K., Chowdhury, P. N., Sain, A. & Song, Y.-Z. (2021). Towards the unseen: Iterative text recognition by distilling from errors. *In IEEE International Conference on Computer Vision (ICCV)*, 2021.

- Bhunia, A. K., Chowdhury, P. N., Sain, A., Yang, Y., Xiang, T. & Song, Y.-Z. (2021). More photos are all you need: Semi-supervised learning for fine-grained sketch based image retrieval. *In IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2021.
- Bhunia, A. K., Chowdhury, P. N., Yang, Y., Hospedales, T., Xiang, T. & Song, Y.-Z. (2021). Vectorization and rasterization: Self-supervised learning for sketch and handwriting. *In IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2021.
- Bhunia, A. K., Sain, A., Chowdhury, P. N. & Song, Y.-Z. (2021). Text is text, no matter what: Unifying text recognition using knowledge distillation. *In IEEE International Conference on Computer Vision (ICCV)*, 2021.
- 6 Chowdhury, P. N., Shivakumara, P., Raghavendra, R., Nag, S., Pal, U., Lu, T. & Lopresti, D. (2021). An episodic learning network for text detection on human bodies in sports images. *IEEE Transactions on Circuits and Systems for Video Technology (IEEE-TCSVT)* 2021.
- 7 Chowdhury, P. N., Shivakumara, P., Kanchan, S., Raghavendra, R., Pal, U., Lu, T. & Lopresti, D. (2020). Graph attention network for detecting license plates in crowded street scenes. *Pattern Recognition Letters* (PRL) 2020.

## **Skills**

Databases MongoDB, MysQL, PostgresQL, sQLite, Google Datastore.

Web Dev HTML, CSS, JavaScript, Google Cloud Platform, Heroku.

Misc. GIT, Tensorflow, Pytorch, Scrappy, MERN Stack, GraphQL, Academic research.

## Miscellaneous Experience

#### **Awards and Achievements**

2020 | iFlyTek Ph.D. Scholarship

West Bengal Joint Entrance Examination Rank: 960 out of more than 0.1 million candidates. For admission to premier engineering colleges in West Bengal.

Got admits from Jadavpur University, IIEST Shibpur, Kalyani Government Engineering College.

Opening rank in Kalyani Government Engineering College, batch: 2014-2018

### **Competitive Coding**

- 2018 Google CodeJam 2018 Qualifying Round Global Rank: 6767. Solved 2.5 problems out of 4.
- 2017 CodeChef Snackdown Pre-Elimination Round Global Rank 729
- 2016 CodeChef Snackdown Qualified to Pre-Elimination Round

#### References

Available on Request