# Tanjina Piash Proma

Independent University, Bangladesh School Of Engineering & Computer Science <u>tanjinaproma@gmail.com</u> <u>https://tproma.github.io/</u>

#### Education

2013-2017 Independent University, Bangladesh.

Bachelor of Science in Computer Science.

Major: Computer Science

Minor: Robotics and Intelligent Machine Thesis: Pill detection using shape, color and printed text from pill image. <u>GitHub Link</u>

Supervisor: Dr. Md. Ashraful Amin

CGPA: 3.54 /4.00

#### **Publications**

- Md. Zakir Hossan, Tanjina Piash Proma, M Ashraful Amin. "Medicine Recognition Using Intrinsic Geometric Property from Pill Image". Pacific Rim International Conference on Artificial Intelligence (PRICAI 2016).
   Winner of the Best Presentation Award
- Ishraq UI Haque, Abul Arabi, Shadat Hossain, Tanjina Piash Proma, Nafi Uzzaman, Mahfuz Hannan and Sajjad Hossain. "Vision Based Trajectory Following Robot along with Swarm Robotics". 3rd International Conference on Control, Automation and Robotics (ICCAR 2017)
- Abul Al Arabi, Hasib Ul Sakib, Pranabesh Sarkar, Tanjina Piash Proma, Jahedul Anowar, M Ashraful Amin. "Autonomous Rover Navigation using GPS Based Path Planning". Asia Modelling Symposium 2017 (AMS2017)
- Tanjina Piash Proma, Md. Zakir Hossan, M Ashraful Amin. "Medicine Recognition from Colors and Text". 3rd International Conference on Graphics and Signal Processing (ICGSP 2019)

## **PROJECTS**

- Pill detection using intrinsic geometric shape from pill image.
   Jan 2016 Aug 2016
- Raspberry Pi Controlled Image Processing Based Line Follower Sep 2016 – December 2016
- Autonomous Rover Navigation using GPS and vision based path planning.
   September 2017 December 2017
- Object (Tennis ball) Detection using machine learning framework (Tensorflow) & OpenCV September 2017 – June 2018

### Skills

- Programming Languages: Python, MATLAB and C++
- Software Library: OpenCV, scikit-learn, Keras, PyTorch, Theano, Tensorflow
- Python GUI framework: Tkinter

## Work Experience

Jan 2014 – Jun 2016	Teacher's Assistant
	School of Engineering and Computer
	Science, IUB
July 2016 – Aug 2017	Research Assistant
	Image Processing & Pattern Recognition
	Supervisor: Dr. Md. Ashraful Amin
	Associate Professor & Head (SECS,
	IUB)
Sep 2017 - Dec 2018	Graduate Assistant
	Image Processing & Machine learning
	Supervisor: Dr. Md. Ashraful Amin
	Associate Professor & Head
	(SECS,IUB)
Oct 2017 - Mar 2018	Research and Development Officer
	Bitec Software

	Plot # 189 (3-B),Block -B,
	Bashundhara R/A
	Dhaka-1229, Bangladesh.
Jan 2019 – Present	Research Associate
	Agency Lab, IUB

# Scholarship and Awards

- IUB Merit Scholarship
- SECS Award 2016
   School of Engineering and Computer Science Award

### Research Interests

Computer Vision and Digital Image processing, Machine Learning, Deep Learning, Artificial Intelligence and Reinforcement Learning.

#### **Conference Presentations**

Asia Modelling Symposium 2017 (AMS2017) Link

- Autonomous Rover Navigation Using GPS Based Path Planning
- "SenseA"-Autism Early Signs and Pre-Aggressive Detector (Substitute Presenter)
- Design and Implementation of Security Patrol Robot Using Android Application (Substitute Presenter)

## **International Competition**

University Rover Challenge (URC 2018), Utah, USA Artificial Intelligence Lead

University: Independent University, Bangladesh

World Rank: 6<sup>th</sup>
<u>URC2018\_scores</u>