Tan Soon Jin

Contact Information

Phone: (60)164897412 Email: jinified@gmail.com Github: https://github.com/jinified
Address: 4, Solok Kampung Jawa 5, 11900 Bayan Lepas, Pulau Pinang, Malaysia

Education

National University of Singapore, Singapore

Bachelor of Computing (Honours) in Computer Science 3.80/5.0 CGPA **Aug 2013 – May 2017**

Specialized in Artificial Intelligence and highly interested in machine learning, data science and computer vision.

Working Experience

Bumblebee, Singapore

Computer vision developer **Feb 2014 – May 2017**

A student-driven project that engineer autonomous system, AUV (Autonomous Underwater Vehicle) for underwater application. The object recognition and tracking system uses OpenCV, Scikit-learn, ROS (Robot Operating System) and Python. The AUV is equipped with the capability to identify objects underwater and classify them for operational use.

HubTurbo, Singapore

Software developer **Jan 2016 – May 2016**

A desktop companion for Github Issue Tracker, one of the project accepted by Google Summer of Code. Upgraded the UI and integrated headless testing to improve robustness of UI testing.

Awards Participations

2nd Place, 18th International Robosub Competition
An international AUV competition participated by almost 40 schools with top schools such as Cornell and UC Berkeley. Collaborated with students from different disciplines to design a vision framework to track objects under perturbed underwater conditions.

Google Summer of Code 2014
Contributed to development of acoustics localization code of **Bumblebee** project. The acoustics framework is responsible for accurate localization of underwater pinger which is applicable to air crash investigation.

Student Achievement Award, National University of Singapore
Bronze award for representing National University of Singapore in 18th International Robosub Competition.

Publications

Y. Raaj, A. John and T. Jin, "3D Object Localization using Forward Looking Sonar (FLS) and Optical Camera via particle filter based calibration and fusion," OCEANS 2016 MTS/IEEE Monterey, Monterey, CA, 2016, pp. 1-10. doi: 10.1109/OCEANS.2016.7761077

Programming Experience

Languages: Python, C, C++, Java, Javascript, Bash, SQL, Go, LaTeX
Technologies:

- **Computer Vision:** OpenCV, Scikit-image
- **Machine Learning & Data Science:** Scipy, Scikit-learn, Panda, Matlab
- **Linux:** Bash scripting, Basic system administration
- **UI:** JavaFX, Folium, Kivy, Qt
- **Mobile:** Android App

Personal Projects

Raijin **https://github.com/cs2103aug2015-w15-3j/main**
A todo list manager written in Java that also uses JavaFX for the UI. Fuzzy search of commands and autocompletion are added to enable better interaction. The project also uses Travis CI (Continous Integration).

Volleyup **https://github.com/jinified/volleyup**
Perform post-analysis of beach volleyball matches to track movement of players and the ball. Apply particle-filter for tracking of players and SVM for tracking of the ball.