Robotics Engineers (Software/Vision/Mechatronics)

We are looking for experienced professionals with background in robotics and automation. The project involves product development for commercialization of a working prototype. More details of the existing project can be found here [http://ac2.tumcreate.org](http://ac2.tumcreate.org)

Availability: January 2018 onwards  
Location: Singapore  
Contact: Dr. Suraj Nair suraj.nair@tum-create.edu.sg

**Background**

The aviation challenge project under TUMCREATE has resulted in a successful working prototype of an intelligent and large scale robotics system for automating air-cargo palletization and de-palletization. The project has developed cutting edge technology in sensing (computer vision), planning (AI) and robotics. Given the success of the project we will be entering in a second phase involving product development and formation of a start-up company. Therefore, we are looking for motivated and talented professionals to participate in our endeavor.

**Qualification Required**

PhD/Master/Bachelors in computer science, electrical engineering or mechanical engineering. Specialisation in robotics and mechatronics will be an added advantage.

**Skills Required**

The candidate should have hands on and professional experience in one of the following areas related to robotics

**Robotic Software:** kinematics, dynamics, motion planning, linear algebra, statistical modelling and optimisation, middleware, software engineering for distributed robotics system.

**Computer Vision:** visual tracking, machine learning, image processing, knowledge of 3D sensors and point clouds, OpenCV, CUDA, OpenCL, PCL.

*Very strong basics in computer science and expertise with programming in C++, Python, Linux, GIT, ROS*

**Mechatronics:** mechanical design, construction and testing of innovative actuation systems, structures & gripping mechanisms, experience with industrial robots, SolidWorks/Catia, Matlab, ANSYS, Simulink, PLC, FieldBus (Preferable EtherCAT and Beckhoff Twincat 3 tool), FEM methods, Actuators, Motor Drive Systems.

**Mandatory Requirement**

- Practical experience on working with real world robot system
- Industrial experience is highly preferred
- Fresh graduates can also apply provided they have real world system experience during their project work
- Familiarity with industrial standards and practices

**What we expect from you**

- Positive attitude and ability to work independent
- Team player and bring value to the team through ideas and initiative
- Awareness of start-up environments with tight deadlines

**What we offer you**

- An international and multidisciplinary working environment
- Opportunity to work on a state of the art robotic system
- Challenging tasks with real-life relevance
- Opportunity to be a part of a high tech robotics start-up