

BAI Fan

G 801 Monroe St, Evanston IL 60202

Cell: (224) 420 0752

seanbai2008@gmail.com

EDUCATION

Northwestern University, Evanston, United States
MSc in Robotics

Sep 2015 – Present

University of Nottingham, Nottingham, United Kingdom
BEng in Electrical and Electronic

Sep 2011 – Jul 2015

- GPA: 3.6
- Head's Scholarship 2011 – 2012
- Dean's Scholarship 2012 – 2013

SUMMARY

Robotics Engineer with extensive project experience from concept to development ; strong leadership and relationship-building skills

ACADEMIC EXPERIENCE

Baxter Pick and Place

Nov 2015 – Dec 2015

- Used canny detection for Baxter's camera to recognize the ball
- Employed inverse kinematics to control Baxter's arm to pick the ball and place it in the tray

Machine Dynamics Project

Nov 2015 – Dec 2015

- Used Mathematica to simulate a ball rolling in a rotatable 3D maze in real time.
- Theory of impact and frame translation were used in simulation

Robot Gesture Control

Sep 2014 – Jun 2015

- Made an Aldebaran Nao robot to mimic human gesture y interfacing it with Kinect
- Used inverse kinematics to control the arms and torso of the robot

Reluctance Motor Control

Jan 2014 – May 2014

- Designed the hardware and developed program for controlling a reluctance motor based on C

WORK EXPERIENCE

Oracle, Hangzhou, China

Jan 2014 – May 2014

- Assisted the team in the research of the realization of the anti-collision algorithm in RFID system
- Collected and read 20 papers based on the stochastic algorithm (ALOHA) and helped the team come up with the optimized dynamic frame slotted ALOHA

Institute of Computing Technology, Chinese Academy of Science, Ningbo, China

Jan 2014 – May 2014

- Worked on a project to design a product called "Posture detector" based on embedded system
- Designed the algorithm for gravity measurement based on C

OTHER EXPERIENCE

Minister of Activity Department, Campers Ambassador, University of Nottingham

Sep 2011 – Jun 2013

- Successfully organized the "Campus Open Day" which received more than 5000 visitors across the country for campus tour in May 14th, 2013

Member of instrument group, Art Troupe, University of Nottingham

Sep 2011 – Jun 2013

- Performed the accordion show on 5th Art Festival Closing Ceremony

SKILL

Good at **C, C++ and Python**; Have several practical experience with **Java, Matlab, Mathematica** and **assembly code**

PORTFOLIO

Please see <http://seanbai2008.github.io/>