

## COURSE PROJECTS

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01/16 - 05/16	<b>Course - Computer Vision</b> Top 1% of the class. Learned image processing/filtering, and various computer vision algorithms: edge detection, pose estimation, image matching and patching, SIFT, etc. Developed an algorithm to recognize the chess board and track the movements of all the chess pieces on the board.
01/16 - 05/16	<b>Course - Mechatronics</b> Learned how to use Atmel Studio to program Arduino in performing multiple tasks. Assembled a quad-copter and programmed an Arduino to control the quad-copter based on the feedback from multiple sensors like Gyro, Compass, Accelerometer, and Barometer.
08/16 - 12/16	<b>Course - Computer Networks</b> Learned how to develop video streaming application with RTSP and RTP. Developed communication applications in Android. Developed a system in C++ to simulate the communication and task allocation of a multi-robot system.
08/15 - 12/15	<b>Course - Robot Mechanics</b> Designed and simulated a robotic system for an assumed nuclear power plant. Designed a robot that can transport the nuclear fuel rod from the loading room on the 2nd floor to the reactor room on the 1st floor and back.

## SKILLS

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LANGUAGES	Algorithms, C/C++, Python, Java, bash, Matlab, Mathematica, $\text{\LaTeX}$
MACHINE LEARNING	TensorFlow, Keras, PyTorch, Convolutional Neural Network, Recurrent Neural Network, etc.
ROBOTICS & SYSTEMS	Robot Operating System (ROS), Velodyne LiDAR, SLAM, Computer Vision, OpenCV, Atmel, TCP/IP, etc.
MECHANICAL	SolidWorks, AutoCAD, ANSYS, Inventor
OPERATING SYSTEMS	Linux, Mac, Android app development using AndroidStudio

## COURSES

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3D SLAM Using LiDAR, Advanced Engineering Analysis, Robot Mechanics: Kinematics, Dynamics, and Control, Fuel Cell, Engineering Optimization, Non-Linear Optimization, Computer Vision, Mechatronics, Field Robotics System and Control, Computer Networks, etc.

## AWARDS AND HONORS

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MAR 2016	First place in DU (University of Denver) Analytics Challenge (\$2,500)
DEC 2012	Outstanding Volunteer in the 60th Anniversary of Beihang University
DEC 2010	Best Debater in Debate Competition for Freshman in School of Mechanical Engineering and Automation, Beihang University

## LANGUAGES

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Chinese:Native, English:Fluent, Spanish:Basic Knowledge, Japanese:Basic Knowledge