PROFILE

Name: Yixiong Geng   Phone: (315)751-8158

DOB: Sep/21/1990   GitHub: github.com/gengyixiong

Email: job@gengyixiong.me   Website: www.gengyixiong.me

EDUCATION

SCHOOL	FIELD OF STUDY	GPA	DATES ATTENDED
Syracuse University	M.S. in Mechanical Engineering	3.5	2013-2015
Beijing Institute of Technology	B.S. in Engineering Mechanics	3.8	2009-2013

PROJECT

1. Helicopter Trim Analysis

I developed a computer program with Matlab and performed the trim analysis of a given helicopter model. More than 10 quantities were calculated, including cyclic pitch, flapping and mean inflow ratio. I also generated plots to show how these quantities change with respect to speed and the location of center of gravity. The results were very accurate.

2. Heat conduction analysis

I analyzed several heat conduction problems with numerical methods. Four different methods were adopted, (1) Backward Euler method, (2) Crank Nicolson method, (3) Richardson method and (4) ADI method. I did comparisons between the above methods to find the most appropriate method for this kind of problem.

3. Cytoskeleton Modeling and Analysis

I got hundreds of immunofluorescent images of different shapes and areas of cells using confocal laser scanning microscope. Then I programmed to analyze the distinct and reliable geometric parameters of cell nucleus and cytoskeletons. As a result, area, perimeter, circularity, angle of cell nucleus, actin area ratio, actin number, actin distribution of cytoskeleton are determined.

EXPERIENCE

1. VPN and Shadowsocks Service Provider

Two VPN servers, located in Los Angeles and New York, are being provided by me to protect online privacy of users.

2. Android Development

I made several system control enhancement and productivity enhancement apps. I am familiar with UI design, Intent, SQLite, multimedia, graphics and animation, et cetera.

3. Arduino and Raspberry Pi Development

I developed an Arduino based remote control car and Raspberry Pi based smart TV. I am familiar with hardware development and GPIO (general purpose input output).