Education Background：

- M.S. Computer Science The George Washington University 2015—2016
- M.S. Biophysics Northeast Forestry University 2010—2013
- B.S. Physics Northeast Forestry University 2006—2010

Research Experience:

- ***2016.6 –present*** Climate data analyzing by R and frost points prediction
  Adviser: Prof. Claire Monteleoni & Michael Mann (GWU)
- ***2014. 7*** Scene Image Identification and Positioning - HIT CS College
  Adviser: Prof. Dongjie Zhu (HIT)
- ***2012. 9 –2013. 3*** The study of defect edge detection in blockboard X-ray images by Shannon entropy **Adviser:** Prof. Dawei Qi (NFU)
- ***2012.2 –2012.10*** The study of multifractal analysis for the defect detection
  Adviser: Prof. Dawei Qi (NFU)
- ***2011.10 –2012.4*** The study of defects description in blockboard by Hough Transform
  Adviser: Prof. Dawei Qi (NFU)
- ***2011.5 –2011.12*** The study of automatic fiberboard density testing based on CT
  Adviser: Prof. Dawei Qi (NFU)
- ***2010.9—2011.3*** Successfully applied for and took part in the graduate technology innovation project of Northeast Forestry University: Non-destructive Testing of Composite Panel Internal Defect **Adviser:** Prof. Dawei Qi (NFU)
- ***2009.10-2010.2*** Participated in the undergraduate innovative experimental project of Northeast Forestry University: The Design and Production of Chinese Medicine Ultrasonic Extraction Machine **Adviser:** Prof. Runzhou Su (NFU)

Paper:

[1] **Shuyue Guan**, Dawei Qi. *Multifractal Analysis of Blockboard X-Ray Images for the Defect Detection*[J]. AISS: Advances in Information Sciences and Service Sciences, Vol. 4, No. 18, pp. 149 ~ 156, 2012

[2] **Shuyue Guan**, Dawei Qi, Yu Han. *Automatic Fiberboard Density Testing Based on Application of Computed Tomography*[J]. Information and Business Intelligence, Vol. 267, No. 4, pp. 614 ~ 620, 2012

[3] **Shuyue Guan**, Dawei Qi. *Defects Description in Blockboard by Hough Transform and Minimum-Perimeter Polygons*[J]. IJACT: International Journal of Advancements in Computing Technology, Vol. 4, No. 23, pp. 365 ~ 375, 2012

[4] **Shuyue Guan**, Dawei Qi. *Defect Edge Detection in Blockboard X-ray Images by Shannon Entropy*[J]. AISS: Advances in Information Sciences and Service Sciences, Vol. 5, No. 5, pp. 988 ~ 996, 2013

[5] Yu Han, DaWei Qi, **Shuyue Guan**. *Application of Computed Tomography in Wood-Polymer Composites Density Detection*[J]. Advanced Materials Research, Vol. 428, pp. 57 ~ 60, 2012

[6] Yu Han, Dawei Qi, **Shuyue Guan**. *Edge Detection of Frothy Wood-Polymer Composites CT Image based on Log Operator*[J]. JCIT: Journal of Convergence Information Technology, Vol. 8, No. 2, pp. 469 ~ 478, 2013

[7] Hongbo Mu, Mingming Zhang, Dawei Qi, **Shuyue Guan**, Haiming Ni. *Wood Defects Recognition Based on Fuzzy BP Neural Network*[J]. matrix, 2015, 9: 10.

Course Project:

- ***2016.1 –2016.5*** An effective way to improve and adapt Finite State Machine to Behavior Tree **Course:** Artificial Intelligence
- ***2016.1 –2016.5*** Hand Gesture Recognition and Tracking Based on Structural Models **Course:** Computer Vision
- ***2016.1 –2016.5*** The study of Incremental Clustering: The Case for Extra Clusters, and Comparison of methods for Spatio-temporal Data Analysis **Course:** Advanced Machine Learing
- ***2015.9 –2015.12*** Comparison of classification algorithms (Adaboost, Decision Tree, Naive Bayes Classifier, ANN, SVM, et al.) in software fault prediction **Course:** Machine Learning
- ***2015.9 –2015.12*** Implement some parts of a simplified Baseline JPEG by Matlab **Course:** Data Compression
- ***2015.9 –2015.12*** Graph analyzing based on data extracting from email, and explored variations in clustering using R **Course:** Big Data and Analytics
- ***2015.5 –2015.7*** The study of Polymorphsim & Concurent Programming in Java, build a simple Web application by using MVC Design Pattern and a simple RESTful Web application **Course:** Advanced Software Paradigms
- ***2015.1 –2015.5*** Search information in CSV file, find closest pair of points in 2D, find the Longest Increasing Subsequence and the study of All Pairs Shortest Path problem **Course:** Design & Analysis of Algorithm

Honors and Awards:

- Provincial Excellent Graduate；Excellent Graduate of NFU 2013
- National Graduate Fellowship (RMB 20000 Yuan) 2012
- Fund of Graduate Technology Innovation Project of NFU (RMB 30000 Yuan) 2010
- Excellent Graduation Thesis of NFU 2010
- The third prize in MCM 2010
- Major Award of NFU 2009

Activities:

- Graduate Assistant in The George Washington University (Jan.-May. 2016; Sep.-Dec. 2016)
- AIESEC，“Dear to Dream”，Volunteer (Jul. 2013-Sep. 2013；Jul. 2012-Sep. 2012)
- AIESEC，“Green Power Now!”，Volunteer (Dec. 2013-Feb. 2014；Dec. 2012-Feb. 2013)
- Harbin Electrical Equipment Factory，Internship (Sep.2010-Nov.2010)

Qualification & Professional Skills:

Computer Languages: Matlab, R, C/C++, C#, Visual Basic

Software: Matlab, Wolfram Mathematica, RStudio, Visual Studio, Eclipses, MS Office (Word, Excel, PowerPoint), Adobe Photoshop

Language Skill: Chinese (Native), English (Professional), Japanese (Elementary)