

PENG GU

Gender: Male | D. O. B: Feb.12 1995

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EDUCATION

Nanjing University of Information Science & Technology (NUIST)

Bachelor of Science

Sept. 2013 – June 2017

- Major: Atmospheric Science
- GPA: 3.5/4.0

Master of Science

Sept. 2017 – June 2020

- Major: Meteorology
- GPA: 3.3/4.0

Major Courses: *Meteorological Statistical Method, Synoptic Diagnostic Analysis, Foundation of Synoptic Analysis, Numerical Calculation Method, Meteorological Program Design and Drawing, Dynamic Meteorology, Geophysical Fluid Mechanics, Advanced Atmospheric Numerical Simulation, Geophysical Fluid Mechanics, and Advanced Synoptic Meteorology*

RESEARCH PROJECTS

Member, “The Global Pattern and Attribution of Inter-Decadal Climate Change Since the Industrial Revolution”

Sept. 2017 – Jun. 2020

This is the 2nd sub-project of “Attribution and Assessment of Multi-Scale Climate Change and Inter-Decadal Events” (National Key Research and Development Project)

- Assessed the couple models data of CMIP5 and analyzed Causes and Mechanisms of Differences in Decadal Variability Periods in Coupling Modes
- Finalized 5 sets of inter-decade transient simulations by utilizing CAM model

Member, “Numerical Simulation of Paleo-climate Parameters and Attribution of Climate Change”

Sept. 2018 – Jun. 2020

This belongs to the 1st research group of “Quantitative Reconstruction Methods of Climate Change in the Past and Regional Climate Reconstruction in China” (National Key Research and Development Project)

- Simulated the ecological vegetation system through employment of the Trace simulation data forcing the CLM model
- Analyzed the Holocene period interactions amongst the East Asian summer monsoon and the ecological environmental determinants

INTERNSHIP

Weather Forecaster Intern, Shaoxing Meteorological Bureau, Zhejiang Province

June 2014 – July 2014

- Participated in the informative rainy season discussions
- Conducted daily weather analysis within 48 hours as based on MICAPS (China's numerical weather prediction system)

Weather Forecaster Intern, Huainan Meteorological Bureau, Anhui Province June 2015 – July 2015

- Collected meteorological data (temperature, precipitation, and solar radiation) at the meteorological observation base
- Created daily hand-painted weather maps underpinned on meteorological observation site data and revised MICAPS forecast results

CAMPUS ACTIVITIES

Class leader, Class 2 of 2013 students at School of Atmospheric Science 2013 – 2017

- Served as the general director of the “Vanish into Thin Air” microfilm in December 2013 and won the school-level third prize
- Directed the post-production of the microfilm "Integrity Accompanying, Honesty Follows" in May 2014 and won the university-level first prize
- Executed the role of director and screenwriter for the drama in the unveiling ceremony of class training activity in November 2014

AWARDS AND CERTIFICATIONS

<i>Second-Class Scholarship</i> , 2013-2014 Academic Year, NUIST	Nov. 2014
<i>“Merit Student” award</i> , 2013-2014 Academic Year, NUIST	Nov. 2014
<i>“Excellent Student Leaders” award</i> , 2013-2014 Academic Year, NUIST	Nov. 2014
<i>National Utility Model Patent Certificate</i>	Apr. 2014
<i>Provincial Level Key Project, University Student Practice Innovation Training Program</i>	May 2015
<i>Second-Class Scholarship</i> , 2015-2016 Academic Year, NUIST	Dec. 2016
<i>“Merit Student” award</i> , 2015-2016 Academic Year, NUIST	Dec. 2016
<i>“Outstanding Graduate” award</i> , NUIST	Jan. 2017
<i>Third-class Excellent Graduate Scholarship</i> , NUIST	Nov. 2018
<i>Third-class Excellent Graduate Scholarship</i> , NUIST	Nov. 2019

RELEVANT SKILLS

High-level Computer Languages: MATLAB, FORTRAN, C, and NCL (NCAR command language, an interpreted language designed specifically for scientific data analysis and visualization)

Numerical Model: CAM, WRF, and CLM

Operating system: GNU/Linux and Windows

PUBLICATIONS

[1] Cheng, J., Wu, H., Liu, Z., Gu, P., Wang, J., Zhao, C., ... & Song, Y. (2021). Vegetation feedback causes delayed ecosystem response to East Asian Summer Monsoon Rainfall during the Holocene. *Nature communications*, 12(1), 1-9.

[2] Ma, H., Li, T., Jiang, Z., & Gu, P. (2019). Unexpected large-scale atmospheric response to urbanization in East China. *Climate Dynamics*, 52(7), 4293-4303.