Hongguang Zhang

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EDUCATION

Hainan University   Haikou, Hainan
Bachelor of Science in Mathematics and Applied Mathematics   *09/ 2015 - 06/2019*
Summa Cum Laude Graduate and Outstanding Thesis
Thesis: A handwritten digit recognition algorithm based on spiking neural networks, supervised by Professor Siling Feng

Cumulative GPA: 3.4/4.0 *(WES)*   **Last 60 Credits GPA:** 3.6/4.0 *(WES)*

Core Courses:
 · Course Design of Probability Theory and Mathematical Statistics II (95/100)
 · Data Analysis (88/100)
 · Principle and technology of database (90/100)
 · Numerical analysis (93/100)
 · Course Design of Mathematical Modeling (90/100)
 · Experiment of Mathematical Modeling (98/100)
 · C++ Programming (97/100)
 · Advanced Algebra II (90/100)

GRE: 322   (VR 157   73%   QR 165   76%   AW 3.5   38%)   Registration No.: 2402808   Test Date: 10/27/2023
TOEFL: 102   (L 28   R 29   S 20   W 25)   Appointment No.: 9151409238931426   Test Date: 09/16/2023

WORK EXPERIENCE

Hainan Dingyue Culture Media Co., Ltd.   Haikou, Hainan
Assistant Accountant   *08/2019 - 01/2023*
• Assisted in formulating the company's annual budget, regularly tracked and analyzed budget utilization, and produced quarterly budget tracking reports.
• Prepared various financial statements, performance accounting materials, and vouchers, including transfer payment receipts, work content records, salary disbursement sheets, and recorded company fund inflows and outflows.
Assistant Producer Director in promotional videos and documentaries   *03/2020- 01/2023*
• Served as Assistant Director, assisting in script writing and post-production for 20 documentary and promotional films.

RESEARCH EXPERIENCE

Project 1: A handwritten digit recognition algorithm based on spiking neural networks   *01/2019-05/2019*
Undergraduate Thesis
Supervised by Prof. Siling Feng, School of Information and Communication Engineering, Hainan University
• Received "Outstanding Thesis" award.
• Developed a handwritten digit recognition algorithm utilizing gradient descent with momentum.
• Constructed a spiking neural network using the Tempotron algorithm, a supervised technique within spiking neural networks algorithms. Conducted testing using the MNIST dataset from the National Institute of Standards and Technology.
• Achieved a recognition rate of 92.00% through testing, showcasing the algorithm's substantial practical value.

Project 2: Comprehensive Technology Service Support Research for China (Hainan) Free Trade Zone   *04/2018 - 10/2019*
National Key Research and Development Project Declaration
Supervised by Prof. Siling Feng, School of Information and Communication Engineering, Hainan University
• Part-time research assistant
• Participated the sub-project "Research on Comprehensive Technological Support for China (Hainan) Free Trade Pilot Zone".
• Assisted in applying for national funding, including:
    · Compiled project budgets based on reliable sources of price information, including expenses for setting up testing servers, equipment costs for various types of workstations such as data modeling and analysis GPU computation servers, procurement of materials for experimental consumables, and personnel service fees.
    · Collected and analyzed data on the research history, achievements, research requirements, and team composition of participating units in previous years related to the sub-project.
    · Assisted in writing the feasibility analysis of the project

Project 3: CT System Calibration and Imaging *07/2017 - 09/2017*

China Undergraduate Mathematical Contest in Modeling (CUMCM)

International First Prize, *Top 292/33062, Top 0.88% (almost 110,000 participants from Australia, Singapore and China)*

Supervised by Principal Zhigang Wang, School of Mathematics and Statistics, Hainan University

- My distribution: Leader
- My main work and contribution:
  - Formulated an algorithm based on the principles of filtered back projection and employed MATLAB for reconstructing received data from the CT system.

INTERNSHIP EXPERIENCE

NIIT Information Technology (Chengmai) Co., Ltd. Chengmai, Hainan

Trainee of R Programming Language *05/2018 - 06/2018*

- Practiced in the application of R language, including data visualization, probability prediction and so on.
- Learned how to use R packages, such as "rvest", "party", "RSNNS", "rcpp", "jiebaR."

China Construction Bank, Hainan Branch Haikou, Hainan

Data Analyst in Individual Loan Center, Housing Finance Department *07/2017 - 08/2017*

- Participated in data processing, documentation organizing, and customer reception.
- Conducted a research project on the status of campus loans for students at Hainan University through a combination of 109 online questionnaires and interviewed students. Analyzed the situation of campus loans.
- Provided suggestions on how to improve the business of campus loans for students in Hainan Province based on the analysis of illegal campus loan cases.

LEADERSHIP & ACTIVITIES

Director of Alumni Affairs *05/2019 - Present*

Office of Admissions and Employment (Alumni Office), Hainan University

- Liaised with and organize alumni from the department and class. Regularly update contact information of alumni.
- Assisted the Alumni Association in coordinating various activities, such as alumni back to school events.

Lecturer *12/2017*

Invited by Mathematical Modeling Association, Hainan University

- Shared knowledge and methods on Matlab, including installing, programming, debugging, etc.

Director of the News Department *09/2016 - 06/2017*

School of Information Science and Technology Student Union, Hainan University

- Responsible for covering events and activities of the university.
- All the news published on WeChat: sports games, famous professors interviews, and welcome parties for the freshmen, etc.
- "Excellent Journalist Station" to our news department was awarded by Hainan University in November, 2016.

Volunteer Teacher *06/2016 -07/2016*

Bijia Primary School, Danzhou, Hainan, China

Organized by Love and Care Association, Hainan University

- Taught English to pupils in Grade 4, having 7 classes each week.

Student Affairs Assistant *09/2015 - 06/2019*

Mathematics and Applied Mathematics 2015 (47 students)

School of Mathematics and Statistics, Hainan University

- Planed all kinds of activities, such as knowledge contests, sports meet, and festival celebrations.
- Tutored classmates in academic studies (research projects, programming, course designs and scholarships applications, etc.)
- Organized volunteer programs in and out of university, such as sales for charity and cares for the elderly, etc.

HONORS & AWARDS

- Employee of the Year Award, Hainan Dingyue Culture media Co., Ltd. *2020, 2021, 2022*
- Summa Cum Laude Graduate for Class of 2019 of Hainan University, TOP 3%, Hainan University *06/2019*
- Outstanding Undergraduate Thesis (Design), TOP 3%, Hainan University *06/2019*
- **International 1st Prize** (TOP 0.88%) ,China Undergraduate Mathematical Contest in Modeling (CUMCM) *11/2017*
  (almost 110,000 participants from Australia, Singapore and China)
- Comprehensive Scholarship￥1000 for each academic years, Hainan University *2015-2016; 2016-2017; 2017-2018*
- Outstanding Leader & Outstanding Student of Hainan University *2015-2016; 2016-2017; 2017-2018*

SKILLS & SPECIALITY

- C++, Matlab, Python, R, SPSS, Lingo, MySQL, Microsoft Office
- Speech (Won 2nd prize in debate competition at School of Information Science and Technology, Hainan University)
- Swimming   (Usual sports for over 10 years)
- Basketball and climbing hills (favourite sports since middle school)
- Xiao (Chinese vertical flute; ever a member of school wind band in middle and high school)
- Language: Chinese Mandarin (Native), English (Fluent), Hainanese (Fluent), Japanese(Basic)