Jinhua Zhang

+1 (720) 519 7770 | jizh1754@colorado.edu

200 Summit Blvd., Broomfield Colorado

EDUCATION

Bachelor of Science: Applied Mathematics Bachelor of Science: Electrical Engineering

University of Colorado Boulder

GPA: 3.497 / 4.00

- Relevant Research position (Quantum computing): Currently researching with Professor Josh Combes about Quantum computing error propagating through different logic gates.
- Relevant Coursework (Mathematics): Calculus I, II, III, Differential Equations, Linear Algebra, Fourier Analysis, Complex Analysis, Chaotic Dynamics, Real Analysis, Numerical Methods
- Relevant Coursework (Electronics): Circuits I, II, Linear Systems, Intermediate C and C++ Programming, Embedded Systems, Digital Logic, Quantum engineering, Semi-conductor and Super conductor Quantum computing

PROFESSIONAL EXPERIENCE

Mechanical Engineer Assistant - Dalian Mechanical Engineering Co.

Description of Work:

- Searching for mistakes in project documents
- Working with expert engineers to correct and improve designs

Software Engineer - Neusoft Automotive Electronics Solutions, Business Division

Description of Work:

- Tested and developed automotive on-board computer
- Reported and worked to correct software bugs •
- Communicated with other departments to resolve problems and advance company goals

Date analysis intern - NREL

Undergraduate Intern Heliostat Techno-Economic Analysis position (Upcoming intern, already got offer, starting at 17th October)

Description of Work:

- Using python and C++ analysis data about Thermal energy
- Helping set up and collecting data from a data base for future analysis

Dalian, China

Oct 2022 - Oct 2023

colorado, US

May 2019 - Jul 2019

Dalian, China

CU Boulder

Aug 2018 - May 2023

Jun 2020 - Aug 2020

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PROJECT EXPERIENCE

Chaotic Dynamics: Using Delay Differential Equations to Model Chaotic Endocrine Biological Processes and Responses

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Complex Analysis: Using Asymptotic Expansions and Deformations in the Complex Plane to Approximate Integrals

Click Here to View

Advanced Linear Algebra: Predictive Modelling of the 2019 Coronavirus Pandemic with Markov Chains

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SKILLS, CERTIFICATIONS & OTHER

Technical Skills:

- Microsoft Office
- Programming: C++, C, Matlab, LTSpice, Python.

Language Skills:

- English (Fluent)
- Mandarin Chinese (Fuent)
- Japanese (Intermediate)

Numerical Methods: Using ODE Solving Methods and Integral Approximation to Analyze Non-Adiabatic Explosions

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Fourier Analysis: Modelling Voltage in Neuronal Axons with the Diffusion Equation and Fourier Transform Methods

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ODE/Linear Algebra: Using Eigenvalues And SVD Decomposition to Analyze Geographic Data of the Mariana Trench

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