




# Chun Wang

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## Education

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- University of Michigan** *Aug 2023 - May 2025*  
*M.Sc. in Electrical and Computer Engineering*
- GPA: 3.84/4.0
- Peking University** *Sep 2021 - Jun 2023*  
*B.Eng. in Software Engineering*
- GPA: 3.74/4.0
- Wuhan University** *Sep 2017 - Jun 2021*  
*B.Sc. in Information and Computational Science*
- GPA: 3.46/4.0

## Research Experience

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- CDF-based Data Generation from Queries with Large Domain Size** *Apr 2023 - Present*  
*First author, paper under writing* [[Paper](#)] [[Code](#)]
- Proposed a fundamentally CDF learning paradigm and a scalable Copula generation framework.
  - Demonstrate efficient handling of billions of query workloads and large scale numerical columns by adaptively managing (scale and stretch) data sparsity in high dimensions.
- Contextual Anomaly Detection of AIS Track Directions** [[Doc](#)] [[Code](#)] *Oct 2021 - Mar 2022*
- Efficiently discover noise closed to trajectories by defining contextual directions of spatial coordinates.
  - Able to reconnect signal-loss clusters with identical spline derivatives.
  - Achieved lower computational complexity on emporal consecutive points instead of entire neighborhood.
- Python Remez Approximation Solver** [[Doc](#)] [[Code](#)] *Sep 2019 - Dec 2019*
- Proposed a relaxation step in Remez Exchange Algorithm, robustly search the equioscillation points.
  - Shared same precision with MATLAB toolbox for low-degrees (2nd order), extendable to up to 33rd with better error guarantees of  $10^{-14}$ .
  - Applicable to arbitrary interval length and handle non-smooth functions.

## Projects

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- Virtual Tours Mini Program Development** *2022*
- A color blindness friendly travel route recommendation software.
- Solving Differential Equations with Neural Networks** *2020*
- Embed Burgers and Shrodinger equations into the PINN network architecture based on PyTorch
- Social Network Analysis: Influence Maximization** *2020*
- Reproduced IMRank algorithm on a large directed graph

## Honors

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- Second Prize (Honorable Mention) of American Mathematical Contest In Modeling (MCM/ICM)
- Third Prize of China Undergraduate Mathematical Contest in Modeling

## Technologies

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**Languages:** Python (proficient), MATLAB, Julia, SQL, PHP, C++, JavaScript, Java