

Jiwon Chang

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EDUCATION

University of Rochester

Rochester, NY

B.S. in Computer Science

2018 – 2023

- Minor in Mathematics
- GPA 3.04 out of 4.0

RELEVANT COURSEWORK

Data Structures & Algorithms Mobile Visual Computing Theory of Computation
Linear Algebra Math Probability Modern Physics Logic Design

PROJECTS

Minimally Trained Image Restoration

September 2021 – Present

To what extent does convolutional neural networks with a very small, noisy training data set approximate the denoising performance of CNNs trained with large data sets?

- Expanded upon research that used inductive bias present in untrained convolutional neural networks for image restoration.
- Analyzed the performance of denoising algorithms with a very small, noisy training data set.

VC-Dimensions and Neural Networks

September 2021 – Present

Under which constraints can neural networks approximate fractal functions of suitable dimensions?

- Studied theoretical data science and complex systems.
- Contributed to research group as part of Mathematical Methods in Data Science program.

Personal Website

2019 – Present

- Source code at <https://github.com/JWPedia/JWPedia.github.io>
- Demo was built with PHP and MySQL, while first published iteration was implemented with Jekyll.
- Current iteration is written with plain HTML, CSS, and JS.

Statistical Evaluation of CCG Cards

2018

To what extent does ordinary least squares regression accurately assess the true mana cost of Hearthstone cards in a randomly drafted format?

- Applied generalized ordinary least squares regression to estimate the true mana cost of CCG cards.
- Analyzed the limitations of naïve linear regression and suggested modification for refinement.
- Developed various strategies to help game designers accurately assign attributes to cards.

PROFESSIONAL EXPERIENCE

BusySquirrels Company

Seattle, WA

Web Developer Intern

May – Aug 2021

- Improved BusySquirrels Shopping Tips browser extension's UI with React.js.
- Implemented analytics across product suite to track customer engagement.
- Redesigned DynamoDB database to accommodate feature extensions.

Freelance

Private Physics Tutor

- Taught students the IB HL Physics curriculum.
- Performed client management and lesson design tasks.

Beijing, China
Aug 2018 – Present

Beijing Zhinuo Law Firm

Legal Assistant

- Assisted lawyers in legal research for Chinese IP litigations.
- Translated legal documents to and from Mandarin for internal research and client communication.

Beijing, China
July 2018

WRITING

Campus Times

Opinions Writer

- Contributed technology and education articles for print and online student publication.
- “Disaster prevention lessons from AP”, Campus Times, October 25, 2020
- “Computer science education needs a reboot”, Campus Times, October 5, 2020

University of Rochester

October 2020 – Present

SKILLS

- **Computer languages:** Java, Python, Javascript, C
- **Tools & frameworks:** React.js, git & Github, AWS, Linux administration, MATLAB
- **Databases:** DynamoDB, IndexedDB, MySQL