

Thanh Duong

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github.com/thanhqduong

Skills

Programming languages: Python, Java, R.

Web: HTML/CSS.

Statistical software: Excel, Stata.

Education

Bachelor of Science in Computer Science, Bachelor of Arts in Mathematics

Expected May 2024

Gettysburg College- Gettysburg, PA

GPA: 4.22/4

Awards: Dean's Honor List (3 semesters), Malcolm R. Dougherty Mathematics Award (Fall 2020 – Spring 2021), Paul Mugabi problem-solving award (Fall 2021).

Applied Data Science Certificate

March 2020 – August 2021

Vietnam National University Ho Chi Minh City - University of Science – Computer Science Center

- Learned Data Science skills (Data preprocessing, SQL, data visualization, and machine learning algorithms with Python and R).

Projects

The Newton's Fractal for Quadratic and Cubic Polynomials

September 2021 - December 2021

Final project of the Chaos and Dynamical Systems course

- Conducting some analysis of Newton's Fractal, with special focus on Quadratic and Cubic Polynomials
- Paper: https://github.com/thanhqduong/PublicDocuments/blob/main/Thanh_Duong__Newton's_Fractals.pdf

Interactive Animation for the Filled Julia Set

December 2021

Integrative Experience of Chaos and Dynamical Systems and Computer Science II courses

- Using Java FX to draw an interactive animation of the Filled Julia Set
- Source code: <https://github.com/thanhqduong/InteractiveFilledJuliaSet>

The Mathematics of Data Science: Principal Component Analysis

July 2021 - August 2021

PiMA - Projects in Mathematics and Applications 2021

- Performing the algorithm with Python: visualization, data dimension reduction, image compression collaboratively on a team
- Paper: "Principal Component Analysis" - https://pimavn.github.io/summer_camps/2021/student_papers

Co-Curricular Engagement

Math Peer Learning Associate – Mathematics Department of Gettysburg College

August 2021 - Present

- Occasionally hold class sessions, assist 10 students with their learning.

Math CalcAid tutor – Mathematics Department of Gettysburg College

August 2021 - Present

- Assist students in understanding math concepts in all Calculus classes at weekly review sessions.

Event team member | Vietnamese Students Association – Gettysburg College

August 2021 - Present

- Help plan, organize activities for bi-weekly events of the club of 30 members.

Bass Singer at Gettysburg College Concert Choir

August 2021 – Present

- Practice weekly and perform at Gettysburg College events.