Hien Nguyen

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Education

University of California, Berkeley

August 2017 – May 2024 (Expected)

Bachelor of Arts, Astrophysics and Physics

Berkeley, CA

• Courses: Classical Electrodynamics, Quantum Mechanics, Python for Astrophysicists, Multivariable Calculus, Linear Algebra and Differential Equations, Mathematical Methods in Physics

Research Experience

Undergraduate Researcher - PyDecal Final Project

October – November, 2022

University of California, Berkeley

Berkeley, CA

- Programmed mathematical model to fit rotation curve of the Milky Way Galaxy
- Simulated a simplified 2D disk galaxy with different rotational velocity parameters to analyze the effect
 of dark matter

Other Experience

Instructor

January – August, 2022

Mathnasium of Pacific Heights, Novanine Industries LLC

San Francisco, CA

- Tutored students in K-8 mathematics using Mathnasium's custom curriculum
- Collaborated with lead instructors and peer instructors in team-teaching: a system where instructors rotate between multiple students while remaining consistent with mathematical methodology and terminology
- Organized and supervised summer camp math and science projects

Research Presentations

PyDecal Final Project Presentation – Appakutty, Sonia Baskaran; Hartanto, Joselin; Nguyen, Hien; Peck, Brianna; Salop, Benjamin

Specialized Skills

Programming: Python (astropy, matplotlib, numerical differentiation and integration, object oriented programming, scipy)

Software: LaTeX, Jupyter Notebook, Google suite, Microsoft Office suite, Adobe Photoshop **Other language(s)**: Vietnamese (conversational), Mandarin (beginner)

Other Interests

Academic/research interests: black holes, cosmology, dark matter, dark energy, stellar physics, particle physics

Industry interests: aerospace engineering and policy

Recreational interests: movie production, game development, trying new food, history and culture