Eric M. Schmid Jr.

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EDUCATION

GCAS College   Dublin, Ireland (completing remotely)
PhD in Mathematical Sciences   Start date: February 2025
Topic: Applied Category Theory & Machine Learning
Advisor: Fernando Tohmé

DePaul University   Chicago, IL
MS in Applied Mathematics   Expected March 2025
GPA: 4.0
Relevant Coursework:
- Current: Numerical Analysis I (final class of the MS program)
- Completed: Real Analysis I, Finite-Dimensional Vector Spaces, Probability & Statistics I, Abstract Algebra I & II (i.e. a theoretical math sequence in group, ring, field theory), Point-Set Topology, Mathematical Modeling, Complex Analysis, Group Theory
- Independent Studies: Number Theory, Commutative Algebra, Category Theory, Mathematical Logic (Model Theory), Algebraic Topology

University of Chicago   Chicago, IL
Graduate Coursework in Computer Science   September 2023 - December 2023
Coursework: Introduction to Python Programming (master's level)

New York University   New York, NY
BA in Individualized Study   Graduated December 2013
GPA: 3.59
Concentration: Continental Philosophy and Visual Art
Dean's List for Fall 2008 & Spring 2009
Minor: Mathematics
Mathematics Coursework: Calculus I-III, Statistics, Linear Algebra, Discrete Mathematics, Non-Euclidean Geometry

PROFESSIONAL EXPERIENCE

Navier   Chicago, IL
ML/Quantitative Analytics Research Associate   October 2024 - Present
https://navier.com/
- Develop and implement machine learning models for cryptocurrency price forecasting using PyTorch and scikit-learn
- Design and optimize deep learning architectures for time series prediction
- Implement backtesting frameworks to evaluate model performance
- Conduct statistical analysis of market data using Python's data science stack
- Create automated data pipeline for real-time model updates and predictions

Bourbaki Capital   Chicago, IL
Co-founder, Operations Officer & Junior Software Engineer   June 2023 - October 2024
- Led a team of developers and analysts, setting team priorities
- Developed software using Python and interacted with Amazon AWS API
- Designed and implemented a websocket listener for market data
- Utilized Python library HFTbacktest for backtesting quantitative financial models

Self-Employed   Chicago, IL
Professional Artist   October 2016 - June 2023
- Exhibited at prestigious galleries and museums across Europe and North America, including Kunsthalle Zürich, Vilma Gold (London), Neue Alte Brücke (Frankfurt), Croy Nielsen (Berlin), Svetlana (New York), Centralbanken (Oslo), Emily Harvey Foundation (New York), M. LeBlanc (Chicago) and Galleria Federico Vavassori (Milan)

Chicago.com   Chicago, IL
Temporary Web Development Consultant   September 2016 - October 2016
- Created a responsive navigation bar for website using HTML, CSS, Javascript, and JQuery
- Implemented improvements for social media integration and mobile experience

Raise.com   Chicago, IL

Software Engineering Intern   February 2016 - August 2016

- Completed software engineering coursework in Java, UNIX and SQL
- Developed various applications including a hangman game, karaoke jukebox and random sentence generator

Ben Schumacher Studio   New York, NY

Production Manager   January 2014 - October 2015

- Wrote material for grant proposals and press releases
- Oversaw the production of artworks for exhibitions
- Produced and assembled artworks for exhibitions

Chicago Sun-Times   Chicago, IL

Web Development Intern   May 2013 - August 2013

- Project-managed web development tasks
- Designed online advertisements and conducted e-commerce market research
- Wrote Chicago.com FAQ and provided IT support
- Managed mailing list with 30,000 subscribers

TECHNICAL SKILLS

- **Programming Languages: (fluent)** Python (PyTorch, scikit-learn, XGBoost, pandas, numpy, SciPy), UNIX, CSS, HTML
- **Fair:** Haskell, Agda, Java, SQL, JavaScript
- **Machine Learning:** Deep Learning, Time Series Analysis, Statistical Modeling
- **Mathematics:** Category Theory, Abstract Algebra, Topology, Analysis, Mathematical Logic

PUBLICATIONS AND ACADEMIC WORKS

- "Economics of Targeted Drugs for Cancer," *Targeted Oncology*, April 2007 (Northwestern University Feinberg School of Medicine)
- "A Very Short Introduction to Topos Theory (adapted from Prof. Pettigrew's notes)" `https://philarchive.org/archive/SCHAVS-8`
- *Prolegomenon to a Treatise*, Bauer Verlag, Frankfurt, 2022 (220 pages)

ACADEMIC ACTIVITIES

- Teaching Assistant for Linear Algebra at DePaul University
- Co-organizer, *Logic, the Methodology of Science and its Applications* Conference, Emily Harvey Foundation, New York
  Speakers: Andrei Rodin, Colin McLarty, David Corfield, Rocco Gangle, Matt Teichman, Ryan Simonelli, Alyssa Van Denburg, Corey Thuro, Kristopher Brown, Reza Negarestani
- Research Assistantship at DePaul University, Fall 2024
- Published conversation between Colin McLarty, PhD (Case Western) and Andrei Rodin, PhD (Lorraine) on my publishing imprint
- Effron Family Scholarship for Pure Mathematics
- The Joseph Sugre Endowed Graduate Scholarship