# Benjamin M. Harki, M.S.

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### **CAREER STATEMENT**

(insert statement)

### **EDUCATION**

## DePaul University, Chicago, IL

2021 - Present

- Master's Student, Computer Science
- August 2023 (Anticipated Graduation)

### West Virginia University, Morgantown, WV

2004 - 2011

- Master of Science in Mathematics (2011)
- Bachelor of Science in Mathematics, Minor in History (2008)

### Additional Coursework as a Non-Degree Seeking Student

2004 - 2011

- University of Illinois at Chicago (2021): Differential Equations PhD level course
- West Virginia University (2015-2019): PhD level courses focused in Mathematical Analysis and Partial Differential Equations

#### **EMPLOYMENT**

### **DePaul University**

2022 - Present

# Teaching Assistant in Python Computer Science Lab

Chicago, IL

- Collaborate with multiple professors to administer their course's Python Lab
- Review lab content, field questions from approximately 30 students, and grade assignments

# Harold Washington College of City Colleges of Chicago Adjunct Instructor in Mathematics

2019 - Present

Chicago, IL

- Instructor for College Algebra and Trigonometry, face-to-face or remotely
- Attend training sessions for collaboration with DePaul/Harold Washington Faculty on how to best serve the DePaul Harold Washington Academy's academic needs

## Pierpont Community and Technical College Coordinator and Assistant Professor in Mathematics

2015 - 2019

Fairmont, WV

- Collaborate with mathematics assistant professors, adjunct faculty, Deans, and Provost to ensure quality of all face-to-face and online mathematics courses
- Develop and adjust curriculum to meet the needs of Pierpont degree programs and accreditation body
- Create master schedule of all mathematics courses and assign instructors
- Oversee all mathematics courses/instructors and resolve student-instructor conflicts
- Instructor for mathematics courses including Applied Mathematics for Industry, Technical Mathematics, College Algebra, Mathematics for Business, and Fundamental Concepts in Mathematics

# Adjunct Instructor in Mathematics Multiple Colleges in Chicago, IL and suburbs

2012 - 2015

• East-West University, Northwestern College, Prairie State College, Southern New Hampshire University Online

# West Virginia High Tech Foundation Consortium Mathematician Intern/Researcher

2011

Fairmont, WV

• Analyzed, programmed, and presented findings as a member of a research team testing a genetic algorithm that governed the machine vision of an unmanned vehicle for a military project

# West Virginia University

2010 - 2011

### Research Assistant and Master's Research Project

Morgantown, WV

• Assisted with development of a flight path coordination algorithm and modified a neural network trained on survey data

### **COMPUTER SCIENCE SKILLS**

- Implemented a blockchain, multithreaded server, cache, and malloc programs
- Experienced in genetic algorithm and neural network AI algorithms
- Expert in Differential Equations (partial and ordinary) both in analysis and in finite element and finite difference approximation methods
- Advanced skill level in C, C++, Python, Java, C#, Rust, and MATLAB and intermediate skill level in Scala and Scheme programming languages
- Experienced in Linux Ubuntu, Win10/11, Office 365 and Google Applications, and HTML, LaTeX, PowerShell, Git, Perforce, Clang, Visual Studio

#### **EXPERIENCE IN RESEARCH**

Intern at West Virginia High Technology Foundation Consortium

- Tested a genetic algorithm on image data that calculated the machine vision of an aircraft in relation to a IR camera for a military project
- Presented results to the research team and attended a collaboration with multiple aerospace engineering companies from across the country

Research Assistant at West Virginia University

- Graduate Research Assistant for Marjorie Darrah, Ph.D.
- Created a Genetic Algorithm to calculate the fitness of a flight path for an unmanned vehicle in a surveillance operation for a military project
- Presented results to our research team and a team of engineers

### Master's Degree Project

• Mined survey data by modifying a Neural Network