## Benjamin M. Harki, M.S.

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Experienced and proven educator with over ten years of teaching in higher education in face-to-face, online, or hybrid environments.

#### **EDUCATION**

#### DePaul University, Chicago, IL

• Master's Student, Computer Science

## West Virginia University, Morgantown, WV

May 2011

Expected: August 2023

- Master of Science in Mathematics
- Bachelor of Science in Mathematics, Minor in History

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

- University of Illinois at Chicago: Differential Equations PhD level course
- West Virginia University: PhD level courses focused on Mathematical Analysis and Partial Differential Equations

#### **COMPUTER SCIENCE SKILLS**

- Python, Java, C#, F#
- Javascript and ReactJS framework
- C, C++, Rust
- Powershell and Batch in Windows, Linux Bash
- Quality Assurance processes with Java
- Manual Software Testing using JUnit
- Software Coverage Testing and Mutation Testing
- MATLAB numerical programming
- HTML and CSS
- .NET, .NET MAUI, and XAML
- Software Engineering Team methodologies of DevOps, Agile, CI/CD
- Unity and Mono C#
- Visual Studio Tools

- Program Analysis with Control Flow and Pointer Analysis, Mitigating Program Vulnerabilities
- Tooling of LLVM Fuzzying, LLVM KLEE, AFL Fuzzying, and Valgrind
- Git and Perforce
- Algorithm theory, Numerical Analysis, and Theory of Computation
- Differential Equations, Finite Element and Finite Difference Methods
- Genetic Algorithm, Neural Network and Machine Learning AI algorithms
- SQL databases, programming, queries, and Database Theory
- Web Communication through Berkley Sockets

#### **EXPERIENCE IN EDUCATION**

### **Professor in Mathematics**

2012 - Present

- Developed strong communication and presentation skills from over ten years of presenting mathematics lectures
- Math Instructor for undergraduate face-to-face, online, and hybrid college courses
- Created syllabi, homeworks, quizzes, and tests using Pearson's MyMathLab, Knewton Alta, Hawkes Learning System, LaTeX, HTML and CSS, Microsoft OneNote and other Microsoft Office 365 Apps
- Student advisor on progress towards earning a degree

#### **Coordination of Mathematics Courses and Curriculum Development**

2017 - 2019

- Collaborated with 15+ math faculty to ensure proper course objective scheduling, organization, consistency, and quality of all math courses across all sections
- Very experienced in creating courses, assigning instructors to approximately 30+ sections of courses
- Created and administered face-to-face and online courses utilizing Blackboard and D2L BrightSpace

- Member of faculty senate and curriculum committees in order to work closely with program coordinators and faculty on their programs
- Attended a Higher Learning Commission workshop on general education assessment

#### **EMPLOYMENT**

# **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
- the DePaul Harold Washington Academy's academic needs

Attended training sessions for collaboration with DePaul/Harold Washington Faculty on how to best serve

**DePaul University** 2022 - 2023

## **Teaching Assistant in Python Computer Science Lab**

Chicago, IL

- Developed strong communication skills when discussing source code and program execution
- Collaborated with multiple professors to administer their course's Python CS Lab
- Reviewed lab content, fielded questions from 50+ students in various sections, and graded assignments

## Pierpont Community and Technical College

2015 - 2019

**Coordinator and Assistant Professor in Mathematics** 

Fairmont, WV

- Developed and adjusted curriculum to meet the needs of Pierpont degree programs and accreditation body
- Resolved conflicts with students and instructors
- 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**

2012 - 2015

## Multiple Colleges in Chicago, IL and suburbs

 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 an Artificial Intelligence 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