

Benjamin M. Harki, M.S.

<https://github.com/chimson>

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Experienced programmer, mathematician, and educator who seeks to apply computer science, mathematics, problem solving, and teamwork ability to a technological solution.

EDUCATION

DePaul University, Chicago, IL

August 2023

- Master of Science, Computer Science

West Virginia University, Morgantown, WV

May 2011

- 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#
- C, C++, Rust
- Powershell in Windows, Bash in Linux
- Quality Assurance and Software Testing using JUnit, C# NUnit, Python unittest
- Software Coverage Testing and Mutation Testing
- MATLAB numerical programming
- HTML, CSS, and Javascript
- .NET, .NET MAUI, and XAML
- Software Engineering Team experience in DevOps, Agile, CI/CD
- Unity and Mono C#
- Visual Studio Tools and Microsoft Azure
- Program Analysis and Control Flow Analysis
- Tooling of LLVM Fuzzing, LLVM KLEE, AFL Fuzzing, and Valgrind
- Git and Perforce Version Control
- Algorithm theory, Numerical Analysis, and Theory of Computation
- Differential Equations, Finite Element and Finite Difference Methods
- Genetic Algorithm, Neural Network Machine Learning AI algorithms
- SQL databases, programming, queries, and Database Theory
- Distributed Systems Web Communication

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

- 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
- Harold Washington College of City Colleges of Chicago** 2019 – 2021
Adjunct Instructor in Mathematics
 Chicago, IL
- Instructor for College Algebra and Trigonometry, face-to-face or remotely
 - Attended 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** 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** 2011
Mathematician Intern/Researcher
 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