Matthew R. McDonald

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EXPERIENCE

Research Assistant

June 2013 - November 2013

File systems forensics research

- Wrote and tested file system for ensics software intended to benefit law enforcement agencies, which extracted and verified data from file systems so as to improve the credibility of evidence brought to court.
- Written in Coq, Scala, and Java.

Programming Competitor

September 2013 - November 2013

DePaul Lost Souls

- Competed in the 2013 ACM international collegiate programming contest.
- Collaborated with a team of 3 on solving programming challenges in Java.
- Placed 31st out of 129 teams.

PROJECTS

Interactive Map of Crime in Chicago github.com/mmcdon20/chicago_police_map

- Ruby on Rails application that uses data sets on police beats and criminal activity from the City of Chicago data portal.
- Data is presented with an interactive map made with Leaflet.

JamTunes

github.com/mmcdon20/MusicApp

- Web2Py application for social music sharing and discussion.
- Created in collaboration with other DePaul students.

EDUCATION

Bachelor of Science, Computer Science (3.95 GPA) DePaul University - Chicago, IL December 2013

Relevent Courses

- C++ for programmers
- Computer Systems I and II
- Database Systems
- Data Structures and Algorithms in Java
- Design and Analysis of Algorithms
- Discrete Math I and II
- Distributed Systems
- Frameworks for Web Application Development

- Intro to Compiler Design
- Java for programmers
- Object Oriented Software Development
- Object Oriented Enterprise Application Development
- Problem Solving for Contests
- Programming Language Concepts
- Software Projects
- Software Testing
- Technical Writing
- Web Development I

SOFTWARE

Programming Languages: Java, Scala, Ruby, Python, and others Other Languages: SQL, HTML, XML, CSS, JSON, LaTeX Tools: Intellij Idea, RubyMine, PyCharm, Eclipse, Visual Studio, Git Libraries & Frameworks: Rails, Web2Py, JUnit, Bootstrap, Leaflet and more

AFFILIATIONS

National Society of Collegiate Scholars (NSCS) Association for Computing Machinery (ACM)