Jonathan M Brelje

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EDUCATION

University of Michigan BSE, Computer Science Ann Arbor, MI

September 2013 – April 2017 (planned)

- GPA: 3.99/4.00
- National Merit Scholar, 4-time Dean's List and University Honors
- Relevant Coursework: Data Structures, Algorithms, Advanced Object Oriented Programming, Operating Systems, Databases, Machine Learning, Linear Algebra, Discrete Math

WORK EXPERIENCE

Microsoft Software Development Intern, ODSP Redmond, WA

- May 2016 August 2016
- Created framework used to track and monitor key performance metrics of newly deployed features
- Implemented a system to automatically push features to the next stage of deployment if metric thresholds were met, thus saving developer time during the deployment process

Quantcast Software Development Intern, Measure San Francisco, CA

- June 2015 August 2015
- Completed proof of concept project showing new insights about measured audiences
- Developed map-reduce jobs to generate data, perform statistical analysis, and validate conclusions
- Worked to increase code efficiency to handle data sets of upwards of N billion records
- Created data visualization tools that drastically reduced time spent on data quality validation team-wide

Title Source Software Development Intern, Nexsys

Detroit, MI May 2014 - August 2014

- Developed both front and back end components of the Nexsys vendor management website (www.nexsysdatasolutions.com)
- Created, improved, and repaired site administration and maintenance pages

PROJECTS

Smart Home Chatbot

Ann Arbor, MI

Device Connectivity Developer

September 2016 – December 2016

- Created a butler-like Facebook Messenger IoT chatbot that could be used to control several smart home devices with natural, conversational commands.
- Integrated chatbot with several common smart home devices, resulting in a product that could control lights, cameras, motion sensors, and window/door sensors.

GUI Controlled Motorized Car

Ann Arbor, MI

Lead Interface Developer

January 2014 – May 2014

- Developed a GUI-controlled motorized car to be used as an educational toy
- Developed full mouse-controlled GUI, path simulation system, and hardware/software interface

LEADERSHIP EXPERIENCE

Kalamazoo Area Math and Science Center Programming Team

Kalamazoo, MI

Team Captain

September 2010 - April 2013

- Led programming team to second place finish at the American Computer Science League International All-Star competition (Senior 5 division), the team's highest-ever finish
- Instituted new weekend practices, improving team performance across the board
- Led student recruitment, resulting in the largest team in KAMSC history

SKILLS

Primary Languages: C++, Java, C#

Secondary Languages: SQL, C, Python, JavaScript, HTML

Environments: Eclipse, Xcode, Visual Studio