

Alexander Zhu
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Permanent Address:
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EDUCATION

Northwestern University, Evanston, IL

McCormick School of Engineering

Bachelor of Computer Science, Anticipated September 2018

SKILLS

Python	C++	C #	Java	SQL
HTTP	HTML/CSS	Unity Engine		
TCP/IP	Javascript	Github		

ACADEMIC PROJECTS

- Machine Learning: Developed a Neural Network using a multilayer perceptron to classify the MNIST handwritten digit dataset in Python
- Artificial Intelligence: Naive Bayes implementation to classify movie reviews based on sentiment in Python
- Artificial Intelligence: Knowledge Base (KB) and Inference Engine implementation in Python
- Human Computer Interaction: Developer on Debris, a tracking interface for environmental debris following natural disasters using HTML/CSS/Javascript
- Tangible Interaction Design: Designed an interactable shark tooth display - use of a real-world 3-D model corresponding with a digital equivalent using HTML/CSS/Javascript
- Database Mgmt Systems: Project work on MIT SimpleDB in Java
- Computer Networking: Developed a Routing Simulator using Distance Vector and Link State Algorithms in C++
- Game Design: 4 player party game Grudge Trudgers - focused around psychological concepts in the Unity game engine with C#
- Game Design: single player sailing game War of Fishermen; Competitive fishing with emphasis on risk versus reward in the Unity game engine with C#

RELEVANT COURSEWORK

Data Structures	Human Interface Design
Computer Networking	Human Computer Interaction
Machine Learning	Algorithm Design and Analysis
Artificial Intelligence	Computer Game Design and Development
Database Management Systems	OpenGL Computer Graphics (Java)

WORK EXPERIENCE

Norris Tech Services Technician - Sept 2014 to August 2015

- Set up events in Norris Student Center involving sound and video equipment ranging from projects to sound mixers for large events.

ACTIVITIES

- Piano: 2000 -
- Long Distance Running/Half Marathons: 2014 -
- Cycling: 2013 -

ACHIEVEMENTS AND HONORS

- Chicagoland Half Marathon Series 26.2 Mile Challenge, Spring/Fall 2015
- Winner of the Vancouver, Washington Young Artists Competition 2012 for Concert Piano

- Winner of the Portland Emerging Artists, Newmark Theatre April 2010 for Concert Piano