Curtis Ullerich

www.curtisullerich.com   (424) 242-2878 | curtisu@iastate.edu

Education

Iowa State University, National Merit Scholar   December 2013
B.S. in Computer Engineering, Minor: Music Technology   **GPA: 3.93**

Work Experience

Google - Software Engineer   Beginning 3/2014
Microsoft - Software Development Engineer Intern   5/2013-8/2013
  • Developed application for Hadoop YARN
Garmin International, Inc - Software Engineer Intern   5/2012-8/2012
  • Prototyped system to solve natural language processing problems using machine learning
  • Independently learned NLP/ML skill set, communicated concepts to superiors
Iowa State University - Undergraduate Research Assistant   2/2012-present
  • Manually analyzed thousands of lines of Android app source
  • Used graph theory to automate static analysis detection of Android app malware
Iowa Foundation for Medical Care - Software Engineer Intern   6/2011-8/2011
  • Wrote logic flow validation for dozens of doctor-patient interactions
  • Participated in daily stand-ups as member of Agile team, used test-driven development
Iowa State University Music Department - Music tech lab moderator   8/2010-12/2010
  • Instructed students in music software use, helped debug various projects
Iowa State University - Bioinformatics Research Application Developer   5/2010-12/2010
  • Fixed and extended Cytoscape plugin from non-compiling source
  • Self-taught basics of graph theory (having taken just one programming class at this point)

Major Projects

Unified Butterfly Recorder   1/2013-present
  • Android app for efficient, semi-automated data recording for conservation workers in the field
ISU Marching Band Attendance System   1/2012-present
  • Spearheaded pro bono team of 4 student developers to implement/release open source system
  • Eliminated hundreds of man-hours of work per season, simplified system for 350 users/year,
    and eliminated all paper waste from the process with award-winning project
University Honors Capstone Project   1/2012-present
  • Explored haptic-enabled virtual reality scenes as music performance interfaces
  • Developed Python scripts to extend interactive capabilities of X3D scenes
  • Performed at Society for Electroacoustic Music in the United State Conference 2013
Pitch Trail Composer   9/2011-12/2011
  • Developed interface in Max/MSP for synthesizing audio corresponding to mouse input

Skills

Proficient in Java; Prior experience with C, C++, Python, and Hadoop

Activities and Leadership

IEEE-USA New Face of Engineering: College Edition 2013, Eta Kappa Nu (president), Cyber Defense
Competition 1st place team, Collegiate 4-H, University Honors Program, Iowa 4-H Youth Technology
Team mentor, Cyclone Marching Band guide, community jazz band founder and leader, author of
human-vs-computer Pong implementation to use in teaching programming to high schoolers

Volunteer Experience

700+ hours as community music performance organizer, horse-assisted   2009-present
    physical therapy volunteer, and 4-H mentor, chaperone, and judge

International Experience

Semester abroad at the University of Birmingham, UK, Spring 2011
  • Classes in data mining/information retrieval, computer networking, philosophy of cognitive

science, microprocessor programming in assembly, and electroacoustic music composition