PROJECTS

YOUTUBE VISUALIZER: handlin.github.io/youtube-visualizer

Uses the YouTube API to grab data from a video's comments section, then creates a visualization from it. CSS Grid for layout, vis.js and custom JavaScript for plotting

EXPERIENCE

ECHO GLOBAL LOGISTICS | INTEGRATIONS ANALYST

July 2018 – September 2018

- Wrote SQL queries to monitor and fix errors in a massive database containing transaction data for over 10,000 shipments each day
- Wrote Python scripts to automate recurring tasks, e.g. searching over 200,000 files for those containing specific strings, turning a 4-hour task into a 4-minute task
- Worked with internal client representatives and external IT teams to provide software and API support and to help diagnose and fix issues with incoming and outgoing data

ADVANCED RESOURCES | INTEGRATONS SUPPORT @ ECHO GLOBAL LOGISTICS

March 2018 – June 2018

- Agency that initially placed me at Echo Global Logistics (which hired me in July)

S/H BOOKKEEPING AND TAX SERVICE | WEB DEVELOPER

December 2017 - January 2018

- Recovered and revamped (to utilize responsive design) decade-old company website (shbats.com) after hosting provider abruptly went under and lost all site data

MIDWEST INTEGRATED CENTER FOR COMPUTATIONAL MATERIALS (MICCOM) | ACTING MANAGING DIRECTOR

June 2017 - October 2017

- Completely rebuilt the MICCoM website (miccom-center.org) with Bootstrap
- Helped organize and run the Summer 2017 MICCoM Computational School

UNIVERSITY OF CHICAGO | RESEARCH ASSISTANT

September 2013 - March 2016

- Implemented, tested, and optimized an algorithm for calculating total energies of molecules and solids. Written primarily in Fortran 90, utilizes MPI for parallelization, and the linear algebra libraries BLAS, LAPACK, and ScaLAPACK
- Research proposal was awarded 1,000,000 core hours of computer time by NERSC in 2016
- Revamped group website (galligroup.uchicago.edu) to utilize responsive design, fix broken components, and created the front-page image using Blender

EDUCATION

UNIVERSITY OF CHICAGO, MASTERS IN CHEMISTRY WHITMAN COLLEGE, BA IN CHEMISTRY AND MATHEMATICS

SKILLS AND ABILITIES

PROGRAMMING LANGUAGES: JavaScript, SQL, Python, Fortran 90, Bash, C++

WEB TOOLS: JavaScript (with JQuery and React), HTML, CSS (with SASS and Bootstrap), Git

COMPUTER ALGEBRA SYSTEMS: Mathematica, MATLAB, Maple