Kenneth DeBacker

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OBJECTIVE

I'm a chemist turned programmer seeking a goal-oriented workplace to continue learning, growing, and creating.

EDUCATION

The University of Chicago   Graduated June 2018
Bachelor of Science with General Honors, Chemistry   GPA: 3.61
Rice University (Through Coursera)   Completed October 2018
Specializations: "Introduction to Scripting in Python", "Fundamentals of Computing"
Coursework/Independent Learning: Data structures; Algorithms; Object-oriented programing; Excel; Graduate level chemistry studies at The University of Chicago, Calculus-3, Linear Algebra (University of Michigan).

TECHNICAL SKILLS

- Python, C++, HTML, CSS, JavaScript, PHP, SQL, BASH, MS Excel, Kivy Language (KV)

WORK EXPERIENCE

Neaton Mathematics LLC   Ann Arbor, MI
Programmer   March 2019 – Present
- Designed and built education software for teaching mathematics to students, built UI interface for students/teachers in JavaScript, CSS, HTML.
- Helped construct backend MySQL databases to keep track of student's progress/ achievements, and connected this to frontend code using PHP.

Snyder Lab   Chicago, IL
Undergraduate Researcher   February 2017 – May 2018
- Designed and improved synthetic routes for constructing natural products and testing reaction methodology targeted by the group, supported with funding awarded by Jeff Metcalf Internship.
- Collected and interpreted data from a host of sources/instruments (SciFinder, Reaxys, Mass Spectrometer, Column Chromatography, and NMR Machine).
- Author on published papers in [Synthesis](#) and [Nature](#).

Michigan Technological Research Institute   Ann Arbor, MI
Research Intern   June 2016 – September 2016
- Interpreted relationship between brain EEG data and environmental noise to demonstrate the effect of sample sleeping environments on newborns' brain activity.
- Interpreted sonar data containing environmental and test noise; used machine learning techniques to develop a sensor prototype for detecting environmental anomalies.

Ridenour Landscaping   Ann Arbor/Saline, MI
Employee   June 2014 – September 2015 (Summers)

INDEPENDENT PROJECTS

Chem-Cat   November 2018- January 2019
- Python-based Android/iOS application for learning organic chemistry. The app is available on both [Google Play](#) and the [App Store](#).

LEADERSHIP EXPERIENCE

University of Chicago Ultimate Frisbee   Chicago, IL
Captain   September 2015 – June 2018 (Captain Junior/Senior Year)
- Helped team to highest finishes at D-I Sectionals (1st) and D-I Regionals (2nd) in program history.
- Organized and led workouts as well as team practice.

Skyline High School Ultimate Frisbee   Ann Arbor, MI
Coach   October 2018 - Present

HONORS AND ACTIVITIES

Honors: Top 3% Project Euler Problems Completed; HackerRank Badges: Problem Solving, Python, C++ (all gold); The University of Chicago Dean's List; Jeff Metcalf Internship Recipient

Activities: Food Gatherers (Volunteer), University of Chicago Undergraduate Chemistry Society "Benzene" (Member), Club Frisbee Teams (Ann Arbor Spoiler, Chicago Beachfront Property, Ann Arbor Four)