

WORK EXPERIENCE

SOFTWARE PROJECTS

November 2014 - Present

Please visit http://sandhoefner.github.io for a portfolio of individual and team projects, including:

- CustomCatan, a board layout optimizer for the popular game The Settlers of Catan
- A Connect Four AI game, implemented using a minimax algorithm with alpha-beta pruning
- Interactive data visualizations exploring topics such as American electoral politics, characteristics of elite rock climbers, and the economics of global climate change
- WikiCopy, a Chrome extension for Wikipedia to streamline note-taking and excerpt sharing

RESEARCHER, WORLD BANK AND HARVARD UNIVERSITY

January 2015 – Present

Co-authored a World Bank-commissioned economic paper examining the distributional impacts of climate change in developing countries, with a focus on extreme poverty. Analyzed a large dataset using Stata and Python; produced interactive visualizations using JavaScript with D3.

TUTOR, ADMISSIONS HERO

July 2014 - January 2015

Assisted clients with college preparation, providing application essay revision, SAT tutoring, and general academic and extracurricular advising.

RETAIL CLERK, KNOTT'S BERRY FARM

June 2013 - August 2013

RESEARCH INTERN, UNIVERSITY OF SOUTHERN CALIFORNIA

June 2012 - August 2012

Worked on the California Young Adult Study, which explores the determinants of educational attainment, civic engagement, and employment among California's youth. Transcribed and coded interviews; wrote topical briefs for the head professor based on qualitative data.

EDUCATION

HARVARD COLLEGE - CAMBRIDGE, MA

A.B., COMPUTER SCIENCE; SECONDARY FIELD, ECONOMICS

August 2013 - May 2017

- Researcher and writer for the National Security Policy Group at the Harvard Institute of Politics
- Recruitment chair and freshman representative for HCC, a competitive rock climbing team
- Violinist in the Bach Society Orchestra
- Credential of Readiness in business fundamentals from Harvard Business Extension School

OXFORD ACADEMY – CYPRESS, CA

HIGH SCHOOL DIPLOMA

September 2008 – June 2013

Academic Decathlon founder and president, parliamentary debate captain, American Legion Boys State delegate, varsity track and field athlete, symphony orchestra violinist

SKILLS AND INTERESTS

Development: Python, JavaScript (with D3 and jQuery), C, PHP, SQL, OCaml, HTML, CSS,

Markdown, LaTeX, version control (Git and GitHub), Linux (Ubuntu), Windows

Statistics: Stata, R, Excel with Solver

Languages: English, Spanish

Music: quitar, violin, mandolin, ukulele

Athletics: rock climbing, track and field, basketball

Other: backpacking, Rubik's Cube

REFERENCES