Christopher Geiger

christophergeiger3@gmail.com | https://github.com/christophergeiger3 | https://christophergeiger.xyz

Technical Skills: Typescript, Javascript, Node.js, React, MongoDB, GraphQL, NestJS, UNIX, Linux, Bash, Algorithm Design, C, Python, Flask, Pandas, Javascript, JSDoc, Redis, Rabbitmq, ESLint, Git, Agile, AWS, DigitalOcean, Selenium, Java, SQL, API Design

Spoken Languages: English and Spanish

Relevant Experience

Plex - Full Stack Software Engineer

- Saved over \$612,000 in yearly costs by building an internal CMS tool for stakeholders which manages millions of dollars of digital media stock.
- Designed and implemented a polynomial time cue point selection algorithm which uses deterministic methods to
 maximize ad gaps during VOD playback sessions.
- Created a "Because You Watched" service with Typescript and Redis which generates movie and tv show recommendations on the homepage of over 15 million active users.
- Implemented a "Sponsored Hub" feature on the Roku using Brightscript.
- Frequent PR review and Git usage.

Plex - Backend Software Developer

 Integrated TIDAL streaming service (view) into the Plex app by designing and building an infrastructure to ingest millions of music data objects via FTP.

The Clipping Project - Creator

 Founded and developed a fullstack open-source clipping tool with Node.js, Typescript, NestJS, React (MUI), and MongoDB (Mongoose). The Clipping Project uses youtube-dl, FFMPEG, and Node.js to parse, clip, and host video data. (view)

RESIST - Co-Author

Co-authored an academic paper which examines the vulnerability of iris recognition devices by using adversarial
machine learning networks to produce replica iris images from leaked template data (view).

Computational Geometry Design Project - Team Leader

Led a team of programmers to build a serverless web application which solves instances of the <u>art gallery problem</u> with Python, Amazon Lambda, and P5.js. (view)

Quickwits - Co-Creator

 Fullstack open-source clone of the popular game Quiplash, designed with Node.Js, Typescript, React (Chakra-UI), Redis, and GraphQL (view).

University of Connecticut Geoscience Research - Researcher

 Saved hours of researcher time by automating experiment processes via tools such as Makefiles and bash scripts for the NCAR CESM project. This project is specific to the Linux systems on UCAR Cheyenne (view).

Yale Center for Research Computing - HPC Technician

- Built a fullstack web-based data visualization tool in Flask for Yale researchers to access HPC usage data (such as
 disk usage and jobs running under their user group).
- Wrote data parsing and data aggregation scripts for SLURM with Python and Pandas.

Education

University of Connecticut B.S.E. in Computer Science and Engineering with Honors, Concentration: Theory and Algorithms Minor: Mathematics McNair Scholar and LSAMP Member

May 2019 - August 2019

April 2022 - Current

June 2020 - May 2021

August 2020 - December 2020

January 2021 - May 2021 ript, React (Chakra-UI),

October 2019 - May 2020

May 2018 - August 2018

May 2021 - Current nages millions of