# Richard A. Álvarez

■ +1 773 469 9726 | @ rawalvarez731@gmail.com | ♥ GitHub | ♦ Portfolio | ♥ Chicago, Illinois

### EDUCATION

Kenyon College

Gambier, Ohio

Bachelor of Arts in Film

Aug 2020 - May 2024

Concentration in Computing and Integrated Program in Humane Studies

- Relevant coursework: Senior Research Seminar, AI for the Humanities, Software Development, Programming Humanity, Introduction to Programming, Data Structures & Program Design
- Extracurriculars: Horn Gallery Videographer

# Walter Payton College Preparatory

Chicago, Illinois

Sep 2016 - Jun 2020

High School Diploma
Work Experience

Private Stock Studios

Chicago, Illinois, United States

Production Assistant

Apr 2020 - Aug 2020

- Assisted with both film and music production tasks, ensuring smooth operations during recording sessions and shoots.
- Assisted coordination with studio engineers, directors, and artists to align production schedules and meet project timelines.
- Maintained a meticulous record of studio sessions, ensuring that all production details, notes, and changes were documented for future

## RESEARCH EXPERIENCE

**HSCHK** 

Chicago, Illinois, United States

Aug 2018 - Nov 2019

Research Assistant

- Joined research conducted by Bernard Dickens III at the University of Chicago aimed at pioneering preventative measures against supply-chain attacks and ensuring file integrity via file checksums.
- Played a key role in the design and implementation of a novel web browser extension, HSCHK, which automates file checksum verification over DNS.
- Effectively communicated, both in writing and verbally, the design philosophy and technical aspects of HSCHK to stakeholders and team members.
- Demonstrated a strong ability to learn independently, quickly adapting to new concepts and technologies, while also showcasing proficiency in collaborative research and development.

## Projects

### Unsupervised Deep Learning and PySceneDetect Analysis of Creative Strategies | GitHub | Digital Kenyon

- Developed a comprehensive analysis of short-format video editing trends by employing PySceneDetect for feature extraction and Deep Neural Networks (DNNs) for unsupervised clustering of videos, yielding insights into innovative editing techniques and creative decisions.
- Utilized advanced visualization methods such as t-SNE and PCA to interpret clustering results, allowing the discovery of underlying patterns and correlations in modern video production and content creation strategies.

# AI-Driven Kubrick-Inspired Film Script Generation | GitHub

- Leveraged Chain of Thought prompting methods and few-shot learning techniques to craft a machine learning pipeline for generating film scripts and content. By extracting the stylistic nuances of Stanley Kubrick's work, the system was able to produce creative and thematically consistent scripts, expanding the capabilities of AI in the cinematic field.
- Utilized Dust.tt to design an API that interacts with Large Language Models, generating scripts, titles, synopses, and character lists.

Programming: C, C++, Python, JavaScript/Node, Rust, SQL, MySQL, PHP

Technologies: Git, Docker, DNNs (Deep Neural Networks) NLP (Sentiment Analysis, Topic Modeling), OpenCV,

 $\operatorname{Linux}, \operatorname{Puppet}, \operatorname{LaTeX}$ 

Frameworks Next.js, React, Tailwind, Scikit-Learn, Keras

Languages: English (Native), Spanish (Intermediate)

Applications: Davinci Resolve, Adobe Suite