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## EDUCATION

### **Masters of Science in Integrated Design and Media**

New York University, New York City, NY

**GPA: 4.0/4.0**      *Expected May 2022*

### **Bachelor of Science in Computer Engineering**

#### **Minor in Computer Science**

Rose-Hulman Institute of Technology, Terre Haute, IN

**GPA: 3.9/4.0**      *May 2020 (3 years)*

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## SKILLS

NNs and GANs

Image Processing

SQL and NoSQL

Virtual 3D Staging

Unreal Engine

Machine Learning

Fluent in Polish and English

OOP

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## EXPERIENCE

### **Indiana Microelectronics, LLC, West Lafayette - AI Engineering Intern**

*June-December 2020*

- Improved the calibration time of controllable microwave filters from 480 man hours to 7 minutes
- Entrusted with conducting 5 presentations, 30 minutes each, on AI calibration work to potential clients
- Leveraged NNs, GANs, and derivatives to create autonomous calibration programs
- Analyzed 6 datasets of up to 10,000 frequency responses each against 4 varying capacitances
- Rewrote a Python program and GUI for viewing and managing SnP files
- Created a database program using the Digikey API for maintaining inventory of company parts
- Wrote 2 additional GUIs and Python libraries for equipment interaction and ML tasks

### **Relativity, Chicago - Software Engineering Intern**

*May-August 2019*

- Optimized 100 C# functional, integration, and unit tests to run cumulatively 40 minutes faster
- Improved daily workflow by creating 4 Powershell scripts to automatically make test improvements
- Upgraded a Jenkins pipeline that connects with Azure using Groovy and Powershell
- Interacted daily with virtual machines and tens of files reaching 1000 lines of code

### **Vertabiz, LLC, Chicago - Startup - Lead Developer**

*May-December 2018*

- Led a team of 3 interns and worked with a team of 4 on user experience and design
- Designed and implemented a RESTful service that interacted with Firebase
- Implemented a REACT Native application that communicated with RESTful services

### **Polish Scouting Organization - Troop Leader**

*August 2014-Present*

- Mentored groups of up to 25 young teens to become young leaders
- Organized and led 13 trips with \$4,000 budgets for up to 40 people
- Managed \$10,000 and organized leadership activities

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## COURSEWORK

### **Mixed Reality Filmmaking + Virtual Production + Motion Capture, NYU**

*Fall 2020 - Spring 2021*

- Manipulated 3D assets using Unreal Engine, Maya, and After Effects with scenography in mind
- Recorded and key-framed 14 motion captures using RADiCAL and MotionBuilder
- Created UnrealEngine blueprints to program 5 user OSC controls and 7 animations, 10 seconds long

### **Image Recognition + Embedded Machine Learning, Rose-Hulman**

*Spring 2020*

- Created three Matlab applications for thresholding and morphological operations to isolate image elements
- Applied PCA, ICA, and NMF algorithms to a training set of 40 images to obtain facial features
- Classified sunsets using machine learning algorithms such as SVM and CNN

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## HONORS

*Tau Beta Pi* Honors Society (Member)  
*Eta Kappa Nu* Honors Society (Webmaster and Tutor)  
*Alpha Lambda Delta* Honors Society (Historian)  
Chicago Startup Weekend (3rd Place)  
Terre Haute Startup Weekend (3rd Place)

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## ACTIVITIES

Study Abroad in Rome, Italy  
NYU and Rose-Hulman Track and Field Teams  
IEEE HKN Student Leadership Conference Attendee  
Rose-Hulman Intramural Official  
Mazur Dancer at the White and Red Ball