

# Harrison Linowes

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## EDUCATION

**University of Maryland, College Park** GPA: 3.5 Expected May 2019

*B.S. Computer Science, specialization in data science*

**Thomas S. Wootton High School** Graduated May 2015

## SKILLS

- Python, Ruby, Java, C++, C#, C, Assembly, OCaml
- JavaScript, HTML, CSS
- Relational Databases, PSQl
- Understanding of fundamental Computer Vision techniques such as edge detection and epipolar geometry
- Familiar with data science lifecycle steps such as data collection and analysis
- Understanding of basic machine learning principals and algorithms including linear regression and gradient decent
- Git, Perforce, Jira
- Blender, Unity 3D
- Numpy, Scipy, Scikit Learn, TensorFlow

## VENTURES

**Polis** Current

*Founder*

- Polis works with other companies and organizations to enhance their marketing and branding strategies using the latest immersive consumer technologies. Polis is a member of Startup Shell, a startup incubator program at UMD.

## NOTABLE PROJECTS

**Data Science Tutorial** 2017

*Created a tutorial covering data science techniques such as data collection, processing, analysis, and visualization, as well as machine learning and hypothesis testing. The tutorial is written in python and uses various libraries on the numpy stack*

**Screen Printing Quality Control** 2017

*Using Python, the OpenCV Library and a Raspberry Pi, created an application which can identify misprinted garments. This application utilized CV practices such as perspective projection, image descriptors, feature point detection, and color histograms to determine a misprint.*

**Raytracer** 2016

*Using C++ developed a ray tracer to generate images and realistically replicate reflections and lighting of a 3D scene.*

## RELEVANT EXPERIENCE

**Capital One** Summer 2018

*Data Engineer Intern*

- Worked with tools such as Kafka, Datadog, and Maven to help maintain and monitor the streaming data platform, an application which facilitates the internal transfer of data.

**Vectorworks Inc.** Summer 2017

*Software Engineer Intern*

- Maintained Vectorworks code base written in C++, added features to set application performance settings using C++ and OpenGL, and created locomotion controls for export to WebView feature using JavaScript and three.js

**NIH, DIMRC** Summer 2016

*Software Developer Intern*

- Used C# and object-oriented programming techniques in conjunction with Unity 3D to develop training simulations

**VisiSonics** Summer 2016

*Software Developer Intern*

- Used C++ and the JUCE library to assist in developing platforms to integrate 3D audio into video and virtual reality

## RESEARCH

**Eyes and Ears of Autism (autismvr.umd.edu)** 2016 – Present

- Attempting to bridge the divide between typically developing(TD) cultures and the culture of people diagnosed with Autism Spectrum Disorder(ASD) using virtual reality.

## HONORS & ACTIVITIES

- Executive Director of Startup Shell 2018-Present
- Speaker at VR and Healthcare Symposium, Harvard Medical School March 2018
- President of UMD VR Club 2015-2018