# **Alex Jones**

Double Major in Electrical and Computer Engineering
Auburn University 3.86 GPA
Developed interest in Robotics and Embedded Software

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## WORK EXPERIENCE

## **GAVLab**, Auburn AL — *Undergraduate researcher*

SEPTEMBER 2018 - JANUARY 2019 - C++ - OpenCV

Designed and implemented a low-latency computer vision algorithm to be deployed onto an ARM processor as part of an FPGA software support package.

## **Starrett Bytewise**, Columbus GA — OCR researcher

MAY 2018 - AUGUST 2018 - C++ - Python - Tensorflow - OpenCV

Designed and implemented OCR algorithms using machine learning as the core recognition and using a combination of machine learning and stroke width transform for character localization and segmentation.

## **ADTRAN**, Huntsville AL — Machine Learning Intern

MAY 2017 - AUGUST 2017 - Python - Tensorflow

Responsible for developing Machine Learning software for the automation of product quality control research. Mainly research based in computer vision.

## Naval Research Lab, Stennis Air Force Base — Software Intern

MAY 2016 - AUGUST 2016 - Java - OpenCV

Rewrote proprietary compression algorithms to improve speed and compression quality for use in aviation.

## **Extracurriculars**

# **SPARC President** – *Spring* 2019 **Robotic Arm** – *ongoing*

Currently working on augmenting an arm developed by the DOD to add absolute positioning data and visual processing, with the ultimate goal of having the arm play chess.

# **IEEE Hardware Competition Mechanical Lead -** ongoing

Currently working as the lead of a team of 6 other students to design the mechanics of a robot competing in the 2019 IEEE Southeast-Con Hardware Competition.

# Robotics Team - 4 years at Grissom High School

Build team captain for 3 of 4 years on the team.

### **PROFFICIENCES**

## PROGRAMMING LANGUAGES

C++, C, Python, Verilog, Java, MATLAB, LabView

### APP. SPECIFIC LIBRARIES

OpenCV, TensorFlow, Hadoop, Tesseract, TWAIN, WIA

# EMBEDDED SYSTEMS DEVELOPMENT

PIC Microcontrollers, Arduino, Raspberry Pi, Xilinx FPGAs/MPSoCs

### CAD

Solidworks, SolidEdge, Autodesk, Multisim, KiCAD, OpenRocket, Openscad

#### **VERSION CONTROL**

**GIT** and Mercurial

#### **AWARDS**

National Merit Finalist Auburn Dean's List

#### **FVFNTS**

HackHSV 2017 - 1st Space Apps HSV 2017 - 3rd