

# JOSEPH R. KOCIK

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**SKILLS** | C, Java, MATLAB, and MIPS Assembly  
VHDL and Computer Architecture  
Vivado (Xilinx Zynq-7000 devices)  
GNU/Linux and Windows

## **WORK EXPERIENCE** | **COMPUTER VISION ENGINEERING INTERN** [COLLINS AEROSPACE](#)

JUNE 2019 – PRESENT

- Expanded application (TCL/C) that provided debugging capabilities for the Coalescence mixed reality system.
- Investigated machine learning application running on Nvidia Jetson AGX Xavier.

### **UNDERGRADUATE RESEARCHER** [NSF SHREC](#)

FEBRUARY 2017 – PRESENT

- Studied general FPGA design targeting Zynq 7000 series SoCs and the CSP
- Conducted Time-Triggered Ethernet research using simulation software VisualSim Architect and a TTTech hardware testbed.
- Modified image processing library (C) to reduce memory usage (ARM Cortex-A9).

### **USRA INTERN** [NASA JOHNSON SPACE CENTER](#)

JUNE 2018 – AUGUST 2018

- Wrote program to procedurally define Time-Triggered Ethernet networks.
- Supported Time-Triggered Ethernet through software development and planning.

### **STUDENT RESEARCH ASSISTANT** [UNIVERSITY OF MAINE: CFWRU](#)

SUMMERS 2013 – 2016

- Helped construct mammal tracking telemetry system. Instructed project members in system software use.
- Assisted grad students in sampling, laboratory, and data collection tasks.

### **INTERN** [PROJECT SHARE \(SALMON HABITAT AND RIVER ENHANCEMENT\)](#)

SUMMERS 2011 – 2012

- Netted, measured, weighed, and identified fish for electrofishing project.
- Conducted Habitat Suitability Indices of salmon and trout streams.
- Restored habitat by relocating logs and boulders. Constructed improved culverts.

## **EDUCATION** | **UNIVERSITY OF PITTSBURGH – CURRENT** MASTER OF SCIENCE – ELECTRICAL AND COMPUTER ENGINEERING

**University of Pittsburgh** – CLASS OF 2019

BACHELOR OF SCIENCE – COMPUTER ENGINEERING

- GPA – 3.898, Dean's List 2015-2019

**HAMPDEN ACADEMY** – CLASS OF 2015

HIGH SCHOOL DIPLOMA

- GPA – 96/100 (unweighted), High Honors 2011-2015