







Daniel Engbert

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 portfolio: github.com/dangbert

Education	University of Maryland Baltimore County (UMBC) <ul style="list-style-type: none">Computer Science Major, Math Minor3.7 GPA, 135 Credits	May 2019
Work Experience	Computer Vision Intern, <i>Robotic Research LLC</i> Trained a Caffe2 neural network on several datasets to perform object detection. Created a C++ camera driver for a computer vision system and performed stereo vision with ROS. Software Developer Intern, <i>AT&T</i> Worked on an Agile team to improve a network security tool by integrating a deep packet inspection C library into the tool and by writing shell scripts to manage a Hive database built on top of a Hadoop Distributed File System. Full Stack Web Developer Intern, <i>UMBC Imaging Research Center</i> Added a major feature to retrieverstories.umbc.edu (UMBC's social media site) allowing users to discover and group related posts into a public collection. Used SQL, PHP, JavaScript, HTML, and CSS. Assistant Programming Instructor, <i>Black Rocket Productions</i> Taught programming skills to middle schoolers at a technology summer camp.	Summer 2018 Summer 2017 Summer 2016 Summer 2014
Projects	Where to Live – Group Project  Created a website for discovering the optimal places to live. Populated an SQL database using data scraped from a web API and ingested from csv files. Hosted the site on AWS. Ray Tracer – Course Project  Created a ray tracer in C++ capable of rendering images of 3D scenes with shading, shadows, and reflections. Also implemented a rasterizer. A.I. Algorithms – Course Project  Implemented the Hill Climbing and Simulated Annealing optimization algorithms in Python to optimize employee shift schedules with respect to a heuristic function. Also implemented a general purpose decision tree for training on and categorizing data. VEX Robot – Course Project  Designed and programmed a robot to complete challenges (moving objects around an obstacle course) and won a college level competition against 15+ teams. Arduino Bike Game – High School Capstone Project  Developed an Arduino system with sensors and a custom PCB that enabled users to control race cars in a computer game while exercising on a stationary bike.	2018 2018 2017 2016 2015
Skills/ Involvement	Programming and Tools <ul style="list-style-type: none">Python, C++, C, Shell scripts, Java, R, Android StudioFlask, PHP, SQL, Node.js, React, JavaScript, HTML, CSSLinux, Git, SVN Software: SolidWorks, SketchUp, EAGLE CAD, Photoshop Electronics: Extensive Arduino and PIC microcontroller experience Languages: Spanish (intermediate level) Involvement: <ul style="list-style-type: none">TA (1 year), Resident Assistant (2 years), and C++ Tutor (1 year)UMBC Environmental Task Force ClubUMBC Hackers Club (participated in 5 Hackathons)Eagle Scout	2014