Ethan Andre Pinsker   ethanpinsker@codeboardcutout.com

Areas of Expertise

C	HTML 5	Php	Altium	PostgreSQL	Crimp tooling
C++	Solidworks	JavaScript	RS-422	UART	Python

Work Experience

Researcher
NASA Contractor - Bay Area Environmental Research Institute, Earth Science Division
                                        January 2017 Moffet Field, CA
- 10 layer board designs in Altium, reduced board size by 20% of previous revision
- ARM7 TDMI microcontroller firmware design and testing in C language, fixed packet losses and now leading design for this controller.
- Created PostgreSQL database with HTML5 and Php for flight data network
- Iridium modem integration for NASA Airborne Science Data and Telemetry System,

Assistant Researcher
NASA Contractor - California State University Monterey Bay, Earth Science Division
                                        June 2016 - December 2016 Moffet Field, CA
- Payload integration for DJI Matrice 600 Unmanned Aerial Vehicle
- Autonomous flight Ground Station Operator. Assess safety of flight range before and during flight; pilot never lost aircraft
- Lithium polymer battery and aeronautical limitation analysis
- Setup and maintenance of payload telemetry

Hardware Developer
NASA, Volunteer Internship Program   June 2015 - September 2015 Moffet Field, CA
- Payload integration for RQ-11 Raven Unmanned Arial System (UAS)
- Designed logistics for the internal sensor. Used ABS 3D printed nose cone
- Present to and attend meetings of NASA Airworthiness & Flight Safety Review Board
- Solve and test circuit placement logistics in payload for optimal protection from hazards

Software Developer
BreezoMeter   Jul 2014 - Aug 2014 Haifa, Israel
- Image Analysis with C++, proof of concept for splitting images queried from a server
- Tested Algorithms with Google Apps API
- Improved web application UX using JavaScript and Php, proof of concept for color gradient over Google Maps

System Technician
Zephyr Networks   Jul 2013 - Aug 2013 Laguna Hills, CA
- Built Back-up and Disaster Recovery servers
- Data center relocation, design and implementation

Publication
Co-Author, "3D scanning and printing of airfoils for modular UAS," SPIE, February 2017

Education

Bachelor of Arts: Network and Digital Technology
University of California, Santa Cruz   Sept 2011 – June 2016 Santa Cruz, CA
Senior Project: Duplex 256 AES encrypted link with ACKme Networks Hopper-U Wi-Fi Module

Bachelor of Science: Electrical Engineering
University of California, Santa Cruz   Sept 2011 – June 2016 Santa Cruz, CA
Senior Project: Mechatronic design class to make an autonomous bot with the PIC32MX microcontroller