COREY HARBERT *4923 Issac Ryan San Antonio, TX 78253 210.204.3782 • charbertee@gmail.com*

ELECTRICAL ENGINEER

Electrical Engineer with over 12 years' experience with Cryptography, SCADA, Electro-Optical, and Control Systems. An innate leader with excellent communication, analytical, managerial, and consulting skills. Proficient in system administration, research and development, design and testing of electronic hardware and software systems, to support various government and commercial agencies.

Technical Skills:

Circuit	***Design:*** Analog / Digital Mixed-signal Design
	Hardware/PLCs: Sensors, Electro-Optical, MPU/MCU, RTOS
Software	***Tools:*** Solidworks, LabVIEW, Multisim, MATLAB/Simulink, AutoCAD, VMware
	Programming: C, C++, Python, Assembly, Unix Scripting, SQL Queries
Test	***Equipment:*** Multimeter, Oscilloscope, Function Generators, Frequency Analyzers

SECURITY CLEARANCE

- TS/SCI

PROFESSIONAL PROFILE

PARSONS, San Antonio, Texas

Cyber System Security Engineer, Dec 2018 – Present

- Performs, and reviews, technical security assessments of computing environments to identify points of vulnerability, non-compliance with established Information Assurance (IA) standards and regulations and recommend mitigation strategies for space cryptography solutions.
- Evaluate vendor submittals, to ensure compliance with NSA/CSS IA certification requirements.
- Assess and mitigate system security threats/risks throughout the program life cycle, and recommend system-level solutions to meet security requirements.
- Contribute to the security planning, assessment, risk analysis, risk management, and certification activities for system and networking operations.
- Facilitate communication between various government agencies to improve overall system design and implementation.

OPEN SYSTEMS INTERNATIONAL, San Antonio, Texas

Project Engineer Supervisor/Systems Engineering Administrator, Sept 2014 – Dec 2018

- Lead Engineer responsible for designing & maintaining SCADA Hardware/Software Systems to support operation of a 24x7x365 government critical infrastructure
- Designed and commissioned control systems to interface with devices for automation, data collection, remote monitoring & control, using various communication protocols, and circuit analysis.
- Performed routine testing and troubleshooting,
- Responsible for system integration, GUI development, system maintenance, deploying patches, performing software upgrades, installation and configuration of new hardware and software, and identifying potential security vulnerabilities.

- Technical advisor for evaluating and testing software, equipment, and systems to deliver customer-centric solutions, also identifying areas of technical risk and proposing different options for mitigating these risks
- Developed custom scripts for the customer's data collection, analysis, hardware evaluation, testing, and report generating.
- Managed performance and development of technicians, project timelines, customer relations, personnel resource allocation, site training, system documentation, and manage maintenance, system standard, and guidelines of SCADA system

TASC INC., San Antonio, TX

Electrical Engineer May 2010 – Sept 2014

- Design, develop, prototype, and perform quality and reliability testing of custom laser, electro-optical hardware and automated software control systems for medical uses for the DOD
- Design, implement, motion control systems for real-time testing and data collection using various 6 DOF sensors and image processing tracking algorithms for laser-based systems
- Develop image processing software and acoustic measurement tools for data collection and data processing
- Lead Modeling and Simulation engineer of a computational Finite Element Model (FEM) brain model, simulating traumatic brain injuries (IED, blunt force), testing and validating personnel protective equipment's protection efficiency using complex, custom algorithms
- Co-Author numerous white papers and publications

EDUCATION & CREDENTIALS

Bachelor of Science, Electrical Engineering (BSEE), 2010
ST MARY'S UNIVERSITY - San Antonio, TX
-Senior Capstone Design Project - Auditory Distress Monitoring System & Digital Audio Mixer

PUBLICATIONS

Journal of Biophotonics - Yakovlev, V. V., Petrov, G. I., Noojin, G. D., Harbert, C., Denton, M. and Thomas, R. (2010), Ex-CARS: exotic configuration for coherent anti-Stokes Raman scattering micro spectroscopy utilizing two laser sources. J. Biophoton., 3: 653–659. doi:10.1002/jbio.201000042

Arvo Journals - Jeffrey W. Oliver, Ginger M. Pocock, Corey A. Harbert, Gary D. Noojin; In vivo Retinal Laser Lesion Formation with Simultaneous Adaptive Optics Enhanced Confocal Scanning Laser Ophthalmoscope (AOcSLO) and Spectral Domain Optical Coherence Imaging (AO-SDOCT). *Invest. Ophthalmol. Vis. Sci.* 2011;52(14):550

Journal of Biomedical Optics - Oliver JW, Vincelette R, Noojin GD, Harbert C, et al; Infrared skin damage thresholds from 1319-nm continuous-wave laser exposures. J. Biomed. Opt. 0001;18(12):125002. doi:10.1117/1.JBO.18.12.125002.