# James Gouveia

(916) 583-1098 | gouveiafjames@gmail.com

**Objective:** A position in embedded systems that will allow me to use my education and positive attitude to help the organization while learning new skills.

### **Knowledge & Skills**

*Networking:* Socket Programming • TCP/UDP protocols • SMTP/POP3 • IPv4 addressing • Traceroute • Packet Analysis • VPN

*Software Tools:* Wireshark • nmap scanning • Sublime • Vim • Eclipse • Putty • MS Office *Hardware:* Oscilloscope • Environmental Chambers • PID Controller • Arduino Uno

Languages & Systems: C++ • C • Java • Python • HTML • CSS • SQL • Ubuntu • Unix • Linux

Development Skills: Agile • Scrum • Scripting • Software Testing • Debugging

#### **Education**

in progress: **BS, Computer Science** • CSU, Sacramento • Aug 2022 **AS Design Drafting** • Mission College, Santa Clara • 2001

**Related Coursework:** Computer System Attacks and Countermeasures • Cryptography • Computer Networks and Internets • Network Systems Administration • Network Security Fundamentals • Linux Operating System • Intro to Relational Database Design & SQL • Intro to Systems Programming in UNIX • English Composition

### **Related Experience**

Cybersecurity Student Assistant

UC Sacramento, Sacramento, CA 5/2021 – 9/2021

Helped to secure the university by serving as a first line of defense and incident response.

Monitored the email phish box, alert the team to phishing runs as well as separate phish emails from legitimate ones. This was accomplished through email header analysis, wget code analysis of links as well as attachment analysis. If the code showed signs of data exfiltration, then it was deemed a likely phish. Investigated suspected account compromises by looking at logs provided by the SIEM LogRythm. Helped to create and maintain an application inventory list that tied security exceptions to specific software as well as provided needed information for a potential audit. Compiled and created monthly reports that included systems secured by bitlocker, Windows 7 machines and vulnerability reports. Modified and repaired broken macros to make report creation easier. Serviced security related tickets from ServiceNow.

Tools: LogRythm, Qualys, Excel Macros, Microsoft Access, ServiceNow, CyberChef, RDP, Prisma

## Sr Reliability Technician

Sensity Systems, Sunnyvale, CA 4/2015 – 7/2017

Sensity Systems, purchased by Verizon in 2017, is an IOT smart cities company that manufactures lighting controls with computer vision and an extensive network that turns light poles into crucial information gathering devices. Personally, responsible for conducting environmental testing, vibration testing, water intrusion testing, accelerated corrosion testing and EMC emissions testing. Also fabricated test fixtures, compiled reports and delivered presentations to the engineering team to improve product performance. Wrote a python program to parse error logs to find errors and create graphs showing critical analysis. *Tools:* PID controllers, python, data acquisition equipment, signal generator, multiplexer

Sr Reliability Engineering Technician Bridgelux, Livermore, CA 8/2011 – 4/2015 Led the Reliability Lab in meeting the LM-80 standard testing to verify the lifetime of LED products. Assisted the lab in the transition from outside LM-80 testing to achieve ISO lab certification and bringing all testing in house. Worked with the production line testing team and LED applications lab team. Analyzed wavelength, color, spread and lumen loss using a large integration sphere. Evaluated LED drivers using an oscilloscope to analyze voltage spikes and startup behavior. Conducted failure analysis using an X-ray machine to analyze how the LED failed. Created summary reports for customers.

*Tools:* Oscilloscope, Integrating Sphere, Soldering Iron, Vitek Hipot Tester, X-Ray Machine, T Type Thermocouples, Omega Thermo DAQ Systems, Vektrex Power Supply System

## **Performance Driver Coach**

**Ongrid,** San Ramon, Ca.

12/2017-present

Introduce new drivers to the sport of high-performance driving while keeping them safe. Instruct drivers in the techniques of track driving, rules, and flags. Evaluate students and report back to Ongrid on the student's progress. Most importantly, make sure they have fun!

## **Project Experience**

## **Buffer Overflow Exploit:**

Performed a buffer overflow attack on the Seeds lab vulnerable shell. Demonstrated a classic overflow attack with all countermeasures turned off. Defeated address randomization and obtained root access through a spraying attack.

#### **React.js Projects:**

Create a Daycare Management Web app with a team of seven fellow students. This app will help to manage all aspects of a day care business from accounting to tracking student attendance. The app works through Firebase and uses a real-time data base backend. Authentication is carried out using the Firebase authentication system.

#### **Python Projects:**

Wrote a port scanner that takes in arguments from the command line and uses a configuration file to feed in port numbers to be scanned.

## **Activities & Accomplishments**

Eagle Scout, Boy Scouts of America