NATHAN MANSKE

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EMPLOYMENT

Senior Software Engineer — Salient Systems — Jan 2020 - Present
- Design and implement features for a server application that records and replays video from security cameras
- Collaborate with cross-functional teams to deliver key features such as encrypted playback and a scalable cloud service
- Utilize computer vision libraries to develop video analytics features such as motion and object detection
- Enhance server security by implementing token-based authentication and upgrading OpenSSL to support TLS 1.3
- Reduce the average execution time of encryption and decryption methods by 36x using the Intel IPP library
- Diagnose and resolve critical customer issues by analyzing crash dumps, network captures, and system logs
- <u>Skills:</u> C++, C#, Python, JavaScript, WireShark, RTSP, WebSocket, FFMPEG, OpenCV

Embedded Software Engineer — Carnegie Technologies — Aug 2019 - Dec 2019
- Developed software for gateways and network servers in an industrial IoT project that used radio for tracking assets
- Implemented a message queueing system for efficient communications between gateway devices and the cloud
- <u>Skills:</u> C++, Python, Bash, MQTT, Wireless Networking

Computer Engineer — Erin Condren Design — Oct 2017 - Jul 2019
- Supported the robotics and electronics automation process to optimize production workflows in a factory setting
- Developed embedded systems to increase the speed and accuracy of the order picking and packaging process
- Built a web application to accelerate quality control tasks and display statistics such as the overall pass rate
- Streamlined business solutions using Google Apps Script and custom Slack bots
- <u>Skills:</u> C/C++, Python, JavaScript, Django, SQL, Bash, Heroku, Electron, Embedded Systems Design, PCB Design, I2C

Associate Software Engineer — Accenture — Aug 2016 - Oct 2017
- Developed and tested new features on Aruba networking devices for various businesses
- Automated tasks to assist in network management and debugging
- <u>Skills:</u> Python, Bash, Wireless Networking

EDUCATION

Austin, TX — The University of Texas at Austin — May 2016
- **Major**: Electrical Engineering, B.S.E. (overall GPA: 3.33)
- **Programming Coursework:** Algorithms, Software Engineering and Design Lab, Software Design and Implementation
- **EE Coursework:** Embedded Systems Design Lab, Computer Architecture, Digital Systems Design, Circuit Theory

SKILLS

- **Software:** C/C++, Python, C#, JavaScript, HTML/CSS, Git, Bash
- **Hardware:** Embedded Systems Design, PCB Design, Serial Communication Protocols, Wireless Networking