Nick Dudde

Public Resume (to request full resume w/ personal info, please use the links below)
✉info@nickdudde.com | LinkedIn

SKILLS

Soldering and circuit design, software design; embedded systems. Proficiency with C and Windows. Experience with Linux, Verilog, SOLIDWORKS, Python, Android, iOS, and OS X.

EMPLOYMENT HISTORY *(relevant positions only)*

Test Engineer, Embedded USB—Extron Electronics March 2024 – Present

- Identify, resolve, document, and present issues with A/V equipment containing USB elements
- Use test equipment to examine USB communication between devices (protocol analysis)
- Provide additional testing support for hardware and firmware teams
- Soldering/repair work/mods for hardware to adjust behavior
- Build small test network environments, typically with a single managed switch
- Develop testing methodologies
- Acquire hardware/software relevant to the testing environment to build a robust suite of capabilities

Electrical Engineer—Honeywell Aug 2022 – March 2024

- Test Honeywell smart utility meter designs, maintain software test platforms
- Solder and assemble DUT fixtures
- Develop clear documentation, handle version control

EDUCATION

North Carolina State University/UNC Asheville (Engineering Transfer Program), Raleigh/Asheville, NC

- *BS Computer and Electrical Engineering*, GPA: 3.4-UNCA, 3.2-NCSU, 112 Credits Earned 2019-2022

Asheville-Buncombe Technical Community College, Asheville, NC

- *AAS Computer Engineering Technology*, Program GPA: 3.7 May 2018
- *AAS Electronics Engineering Technology*, Program GPA: 3.7 May 2018

PERSONAL EXPERIENCE/PROJECTS

- Operate personal website https://www.nickdudde.com.
- Led team prototyping a small autonomous vehicle with IR detectors and Wi-Fi control. Design document included testing processes, power analysis, design flowcharts, block diagrams and schematics.
- Building a *Tron: Legacy*-inspired LED bodysuit. Uses a system of 400 addressable LED modules powered by a microcontroller. Lights synchronize to audio or programmed sequences. Won second in a local contest.
- Built powerful showcase gaming PCs with Arduino-powered aRGB LED lighting.
- Converted an iMac into an “arcade machine” that runs Raspberry Pi OS, Android, and Sony hardware.
- Operate Home Assistant smart home w/ 30+ connected devices including DIY esp32-controlled strip lighting
- Freelance PC/phone repair and technical support.
- Filmed and produced semimonthly videos with small high school team using Adobe Premiere.
- Supervisor and server tech for independent multiplayer video game server w/ documented accountability and expectations.
- Design, fabricate and sell graphics and vinyl stickers/decals created using Adobe CC and CAD programs.

CERTIFICATIONS/AWARDS/HONORS

- Academic Achievement Award, President’s List Spring 2018 and Fall 2017, Dean’s List Fall 2016, AB-Tech