

Brian Ellsworth

www.linkedin.com/in/brian-ellsworth/

Education

- B.S. Applied Physics — Rutgers University, New Brunswick, New Jersey** (2018)
- Departmental Honors, Cum Laude, minor: Computer Science
- B.S. Electrical & Computer Engineering — Rutgers University, New Brunswick, New Jersey** (2018)
- Honors, Cum Laude

Work Experience

- Embedded Engineer — Prong Technologies LLC, Huntsville, Alabama** (7/2021 – present)
- Writes C/C++ code for microcontroller-based printed circuit boards
 - Writes Python and Bash scripts
 - Troubleshooting printed circuit boards using electrical test equipment
 - Leads product development of embedded products
 - Prototypes parts and assemblies using CAD models, FDM, and resin printing
 - Generates and maintains product documentation
 - Develops and updates manufacturing and test procedures
 - Ensures project completion within budget, quality, and contractual constraints
- Project Engineer — Everson Tesla Inc., Nazareth, Pennsylvania** (6/2018 – 2/2020)
- Assumed full responsibility for the manufacturing of electromechanical products while meeting requirement, budget, schedule, and quality constraints
 - Created and maintained documentation for each project, including project schedules, price quotations, bills of materials (BOMs), manufacturing procedure outlines (MPOs), data travelers, and quality assurance requirements
 - Tested products for electrical and geometrical conformance
 - Integrated project tasks by working directly with customers, suppliers, procurements, CAD engineers, manufacturing technicians, and quality assurance
 - Oversaw technicians and machinists to complete essential project operations
 - Communicated with suppliers and customers to meet project requirements
- Undergraduate Researcher — Andrei Research Group, Piscataway, New Jersey** (6/2017 – 5/2018)
- Increased by an order of magnitude the diameter of monocrystalline graphene grown in a chemical vapor deposition system via electrochemical polishing

Volunteer Experience

- Executive Board Member — Society of Physics Students, New Brunswick, New Jersey** (9/2017 – 5/2018)
- Coordinated and executed events with undergraduate students and physics faculty

Awards

- Eagle Scout — Boy Scouts of America, Middletown, New Jersey** (2013)
- International Baccalaureate Diploma — IB Diploma Programme, Freehold, New Jersey** (2013)
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Skills

- C/C++ programming in VSCode
- Python programming
- Schedule creation using Microsoft Project
- Microsoft Office: Excel, Word, PowerPoint, Visio
- Data analysis using spreadsheets, Python, SQL
- Windows XP, 7, 10, 11 and Linux OS
- Complexity analysis of algorithms and data structures
- Git and Github for version control
- Bash and PowerShell scripting
- Electronics testing using test equipment
- Electrical testing per MIL-STD specifications
- PCB design and component selection
- SolidWorks for CAD modeling
- Iterative prototyping
- Maintaining project documentation
- Database interaction via ERP software and SQL
- Familiarity with manufacturing methods
- Electrical soldering