James Davidson  
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**Objective**

Enthusiastic Electrical Engineering student at the University of Ottawa seeking an internship position to apply hands-on experience in circuit design, Programming, automation, and renewable energy solutions. Passionate about embedded systems, robotics, sustainable energy technologies, and innovative problem-solving. I am eager and motivated to gain more experience and learn from experts.

## Education

**University of Ottawa** — *Bachelor of Electrical Engineering*  
2028

## Technical Skills

* Circuit design and analysis
* Arduino programming and embedded systems
* Python (automation and scripting)
* 3D printing technologies (SLS, FDM)
* User interface development for hardware control
* Electrical troubleshooting and debugging
* Effective in C++

## Projects & Experience

**Arduino-Powered Metal Sample Extraction System**

* Designed a circuit to control two DC motors for extracting metal samples from inside a tube.
* Developed a user interface to operate the motors and provide real-time feedback to the user.
* Integrated Arduino-based control logic for precision operation and automation.

**Python Automation Scripts**

* Developed Python scripts to automate repetitive engineering tasks.
* Implemented data processing and hardware control through scripting.

**3D Printing Research & Report**

* Authored a recommendation report: *“Why Selective Laser Sintering Outperforms Fused Deposition Modeling.”*
* Researched and compared additive manufacturing techniques for industrial applications.

## Certifications & Extracurriculars

* [Relevant Certification (if any, e.g., PCB Design, Python, etc.)]
* Member of [Engineering Club/Robotics Team]
* Participation in Hackathons or Engineering Competitions (if applicable)

## Additional Information

* Open to relocation for internship opportunities.
* Passionate about renewable and affordable energy solutions, automation, and emerging technologies in electrical engineering.