

## SHANNON HAMP

Photonics Applications  
& Sales Engineer at  
Spark Photonics Design

I serve as a technical point of contact for customers using software to design photonic integrated circuits (like electronic circuit boards that use photons instead of electrons!). I develop workshops to empower customers, deliver technical demonstrations, and represent Spark at conferences and workshops!

**WHAT IS MY CONNECTION TO QUANTUM?** Photonic integrated circuits guide light to transmit signals and read data, enabling technologies like quantum computing! Additionally, when photons interact with tiny structures on a circuit board, we can take advantage of quantum properties like entanglement.

### HOW DID YOU GET INTO A QUANTUM-RELATED JOB?

I chose to study optics and photonics before I knew that the field enables quantum technologies. Optics and photonics opens the door to a wide range of career paths!

**WHAT DO YOU LIKE BEST ABOUT YOUR JOB?** Meeting a wide variety of customers who all have exciting and unique applications for photonic integrated circuits.



**LEARN MORE**  
[montana.edu/smrc/quantum/](https://montana.edu/smrc/quantum/)

# I AM QUANTUM

Close-up view of a photonic integrated circuit (PIC).

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PHOTONICS

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