DESCRIPTION

Position Summary
A valuable hands-on opportunity to participate in the technical, strategic and creative development of a Bluetooth and WiFi consumer electronics-based company within the start-up suites on the Binghamton University campus. Working with experienced managers, business owners and technical partnerships around the globe, you will augment your classroom work with real life participation in multiple fields and disciplines to support the company product development and commercialization strategy. As a part of the first group to be engaged with the Sonic Blocks, you will be in the unique position to help establish the corporate attitude, process and culture. At the end of your internship with Sonic Blocks, you will have a solid foundation and understanding of what it takes to start a technology-based company from scratch. You will also walk away with experience working with C-Suite executives, vendors and partners, and be in a position to positively impact your future with this unique experience.

Responsibility
Your internship will be focused on the design and development of custom circuitry for the Sonic Block audio systems. You will work with senior company executives, 3rd party support companies and your school professors and staff to ensure that the Electrical objectives of the design are achieved, while supporting the educational mission of the University. Specifically, you will be responsible for:
• Architect, design, fabricate, and assemble products to meet Sonic Blocks product requirements.
• Feasibility studies including requirements generation, component selection, initial design of power supply, a/v signal distribution and quality retention, block diagrams, design summary, and bill of materials
  o Power supply distribution and management
  o Mechanical & Industrial Design coordination
  o Design options
  o Risk assessment and mitigation
  o Strategies for Antenna design and certifications
• Prototype development including detailed designs, schematic capture, test plan development (PCB, System, Certification), including at least three PCB spins
  o PCB layout, fabrication, and assembly support
  o Software development and integration
  o PCB test (including pre-certification)
  o System Test
• Commercial Development including, manufacturing considerations, schematic updates, final PCB layout, fabrication, and assembly support, PCB test, System test
  o FCC, Bluetooth, WiFi, and other testing certification requirements
• Working with the ID, ME, Operations and business teams to develop creative approaches that favorably optimize design elements such as product cost, performance, feature set, time to market and technical risk.
• Recommending practical applications & providing advice and consultation to engineering personnel and management in areas of specialization.
  • Contribute to best in class design practices and methodologies.
  • Communicating directly with team members and senior management, ensuring senior staff is kept informed of important and relevant service/design decisions.
• Preparing technical proposals.
• Performing design validation using digital and physical prototyping and software simulation analysis tools.

Qualifications
To be eligible for a Sonic Blocks internship, you must be a full-time student currently enrolled in Binghamton University or another SUNY school, working towards an accredited degree in Electrical Engineering. A strong background in signal processing is desired. Sonic Blocks will also consider recent graduates or MBA or PhD candidates for the internship position.

Aptitudes:
• Must be entrepreneurial in spirit and action.
• Must be an independent thinker and goal oriented.
• Must be highly motivated & possess perseverance.
  • Must possess strong interpersonal skills & be a team player.
• Must possess organizational skills & be process-oriented.
• Must have desire & ability to work within or lead a cross functional team.
• Must work comfortably with Senior level management. Must be analytical.
• Must be computer literate (Office Suite, Basecamp Project Management Software, Google docs).
• Must be able to work independently as required.

Education:
• Must be working towards a Bachelor’s Degree or Master Degree, or equivalent work experience.

Physical Demands:
• Must be able to sit for extended periods of time (on planes, during telephone calls, meetings, etc.)
• Must be able to work at a computer (laptop) for extended periods of time.
• Must be able to function in a high pressure, fast moving environment.
• Physical requirements include the ability to work with heavy electronics & equipment.

Environmental Conditions:
• Home and/or Office environment.
• Possible travel environment

Notes:
These guidelines describe some of the major position expectations but are not intended to, and do not, describe all such expectations or limit the Company’s general and specific expectations of the Electrical Engineering internship program. These guidelines are not, and are not intended to be, a contract of employment or an agreement or offer to employ any individual for any particular length of time.