

VICKY LUAN

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Materials engineer and sportswear designer with 3 years of experience in advanced concept design and physical prototyping for performance apparel, accessories and footwear. Strong expertise in 2D/3D CAD, manufacturing, sewing, patternmaking, and materials research.

EDUCATION

Certificate in Fashion Design School of Fashion Design	Dec 2022
Diploma in Textiles and Technology Fabricademy	Apr 2022
M.S. Materials Science and Engineering Boston University	Sep 2020
B.A. Chemistry University of Rochester	May 2016

EXPERIENCE

Future Product Design Apprentice NOBULL	Jul 2022 - May 2023
<ul style="list-style-type: none">• Initiated the company's first makerspace by compiling machines, tools, and supplies to execute quick in-house mock ups and promoted advanced design software• Explored advanced materials and processes for all product categories (apparel, accessories, and footwear) through domestic and international vendor meetings, trade shows, webinars, workshops, and academic research studies with an emphasis on sustainability• Executed design concepts such as lattice midsoles and zero-waste apparel through the use of Rhino, Blender and Clo and analyzed dynamic force and stress simulations	
Couture Design Assistant Daniel Faucher Couture	Feb - Dec 2021
<ul style="list-style-type: none">• Expedited preliminary fitting process constructing initial muslins and marking alterations• Produced linings, trim, and appliqué pieces for clients and was responsible for hand-sewing final details on finished products• Provided efficient solutions to machinery issues and maintained overall studio organization	
Prototyping Intern Final Frontier Design	Jun - Sep 2021
<ul style="list-style-type: none">• Constructed a sample of high compression pants for dual-purpose aerospace and medical applications to support fighter pilots or patients in need of increased blood flow• Optimized and accurately updated tech pack documentation of digital patterns with sizing coverage, bill of materials (BOM), cutter's must and construction instructions• Incorporated multiple technical areas combining sewing and laser cutting, with various knit fabric, elastics, and custom Velcro attachments	
Engineering Graduate Researcher Boston University	Sep 2019 - Jun 2020
<ul style="list-style-type: none">• Developed a standardized test method for bug-bite resistance in military uniform fabrics• Improved fabrication and assembly time by 60% through the redesign of the simulated proboscis to increase testing frequency on a dynamic mechanical analyzer (DMA)• Completed Master's Thesis: <i>Investigation of Textile Resistance to Puncture by a Mosquito Proboscis</i>	

PROJECT EXPERIENCE

Ice Climbing Collection | NOBULL

Jan - May 2023

- Led and managed an innovative design project with fellow apprentice designers by tracking progress, creating deliverables, organizing presentations and documenting process on Miro
- Explored the optimal combination of materials for extreme cold environments that are highly durable, waterproof, breathable, thermoregulating, and sustainable
- Procured and rendered line sketches into 3D models through Blender and Clo and prepared physical prototypes by hacking existing products and 3D printing outsole designs

LED Swim Suit | Fabricademy

Jan 2022 - Apr 2023

- Design, procure and assemble an LED light-up swimsuit that tracks human motion and biomechanics to grant users a sense of kinesthetic and spatial awareness
- Explore successful combinations of materials to create fully waterproof casings for electronic components while maintaining full function of the sensors and actuator
- Utilize prototyping techniques such as CAD, Arduino circuits, and 3D printing, to create quick and accurate mockups of the housing unit for the circuit
- Maintained full documentation of process using VS Code and GitLab for web publication

TECHNICAL SKILLS

- Accumark Gerber
- Adobe: Illustrator, Lightroom
- Blender
- Centric PLM
- CLO/Marvelous Designer
- GitLab, GitHub
- Google Suites
- Microsoft Office
- Miro
- Rhino 3D

MACHINERY

- 3D printing
- 3D scanning
- Laser cutting
- Sewing
- Vinyl cutting
- Heat pressing
- Soldering

ATTRIBUTES

- Attention to detail
- Communication
- Organization
- Resourcefulness
- Self-motivation
- Time management
- Other languages: Mandarin (verbal), French (reading)