

# VICKY LUAN

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## OBJECTIVE

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Seeking opportunities to advance product development with innovative soft materials using my background in materials engineering, chemistry, and fashion design

## EDUCATION

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<b>Certificate in Fashion Design</b>   School of Fashion Design	Expected Aug 2022
<b>Diploma in Textiles and Technology</b>   Fabricademy	Apr 2022
<b>Master of Science, Materials Science and Engineering</b>   Boston University	Sep 2020
<b>Bachelor of Arts, Chemistry</b>   University of Rochester	May 2016

## RELEVANT EXPERIENCE

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**Prototyping Intern** | Final Frontier Design Jun - Sep 2021

- Constructed high-compression knit pants for dual purpose aerospace and medical applications
- Optimized and managed tech pack documentation of digital patterns with accuracy and sizing coverage, bill of materials, and construction decisions
- Incorporated multiple technical areas combining sewing and laser cutting, with various knit fabric, elastics, and custom Velcro attachments

**Couture Design Assistant** | Daniel Faucher Couture Feb - Dec 2021

- Expedited preliminary fitting process constructing muslins from scratch 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

**Graduate Researcher** | Boston University College of Engineering Sep 2019 - Jun 2020

- Developed a standardized test rig and method for bug-bite resistance in military uniform fabrics
- Improved design and fabrication method of the simulated proboscis for 60% faster assembly
- Completed Master's Thesis: *Investigation of Textile Resistance to Puncture by a Mosquito Proboscis*

## PROJECT EXPERIENCE

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**LED Swim Suit** | Fabricademy Jan 2022 - present

- Design, procure and assemble an LED light-up swimsuit that tracks human motion and body rotation 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 actuators
- Utilize prototyping techniques such as CAD, Arduino, and 3D printing, to create quick and accurate mockups of the housing unit for the circuit

**Textiles and Technology** | Fabricademy

Sep 2021 - present

- Engaged in a variety of fast-paced softgoods projects developing fabrication skills such as: e-textiles, wearables, documenting with GitLab, 3D modeling and scanning, soft robotics, skin electronics, open source hardware
- Created over ten swatches of different textile goods integrating technical components using various hardware and machinery

**Laser Cut Sportswear** | School of Fashion Design

Sep - Dec 2021

- Designed and constructed stretch Ponte knit jacket and shorts, and 1-piece swimsuit
- Developed digital tech pack from scratch and documented construction process with modifications
- Implemented laser cutting technology to create complex see-through patterns on a jacket/pant sample

**TECHNICAL SKILLS****MACHINERY****ATTRIBUTES**

- Adobe: Illustrator, Lightroom
- Google Suites
- Microsoft Office: Word, Excel, Powerpoint
- GitLab, GitHub
- Visual Studio Code
- Creo Parametric 5.0
- Rhino 3D
- Slicer for Fusion 360
- Arduino, Adafruit, Sparkfun
- Basic Circuitry
- Accumark Gerber
- CLO
- ClickUp
- MATLAB
- Markdown
- Miro

- 3D printing (Sindoh, Ender, Formlabs)
- Laser Cutting (Glowforge, Epilog, Zing)
- Sewing (Brother, Juki, Singer, Vibrant)
- Vinyl cutting (Silhouette)
- Heat pressing
- CNC milling
- Soldering

- Attention to Detail
- Communication
- Time management
- Organization
- Coaching
- Determination
- Patience
- Team player
- Other languages: Mandarin (verbal), French (reading)