THALIA WOOD

(She/Her)

Summary -

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I'm a generalist programmer, problem solver, and artist, employing a wide variety of software and physical fabrication tools to address artistic, business, and design challenges. I believe strongly in interdisciplinary thinking and developing for customers as people, not numbers, and reflect those beliefs in my work. As creators, it is our responsibility to bring joy and play into the world, and I look forward to honing my technical and artistic craft in a workplace that shares those values.

TECH STACK (Experienced) JavaScript, CSS, HTML5, p5.js, C++, MaxMSP, (Familiar) Java, C, C#, Blender

EXPERIENCE -

WEB & SOFTWARE DEVELOPER

Archetyp Alpine Wine & Spirits

Canby, OR

Mar 2023 - Present · I yr 8 mos

BRICK SPECIALIST

LEGO Brand Retail

♀ Tigard, OR

Nov 2021 - Aug 2022, May 2023 - Aug 2023 · I yr 2 mos

TEACHER'S ASSISTANT (VOLUNTEER)

Oregon Museum of Science and Industry

Portland, OR

Dec 2020 - Apr 2021 · 5 mos

Responsible for developing both internal and public-facing software to meet Archetyp's unique needs as a company intersecting the roles of wine importer, distributor, and retailer. Developed a Commerce7 integration utilizing p5.js to dynamically generate product catalogs as high-quality vector PDFs, driving trade sales for five-figure accounts, as well as D2C club signups. Other generalist responsibilities include web content curation and assembly, inventory management for ~100 SKUs, warehouse work, and vendor relations.

Delivered signature and memorable experiences for LEGO Store guests, inspiring joy and play as well as driving store sales at one of the highest revenue-per-square-foot LEGO stores in N. America and contributing to a friendly workplace culture. Leveraged personal storytelling and extensive product knowledge of a multi-hundred SKU catalog to help guests select their perfect play experience. Upheld the LEGO Group's Promises and Spirit, and approached every effort with a mind for quality work.

Engaged and inspired K/I students to develop a lifelong passion for learning and science. Delivered critical educational support to a class of ~20 students during the height of the pandemic, acting as a tutor, mentor, and friend in a time when young students otherwise might not have any of the three. Led play experiences designed around science education to augment student learning and expose them to exciting STEM concepts.

EDUCATION -

COMPUTER SCIENCE (BS)

ASU Fulton Schools of Engineering | Tempe, AZ

Aug 2022 - May 2026 · Ongoing · 3.90 GPA

MEDIA ARTS AND SCIENCES (MEDIA PROCESSING) (BS)

ASU Herberger Institute for Design & the Arts | Tempe, AZ

Jan 2024 - May 2026 · Ongoing · 4.09 GPA

SELECTED

Coursework

- CSE 365 Information Assurance
- CSE 360 Intro. Software Engineering
- CIS 300 Web Design & Development
- CPI 211 3D Game Development
- AME 330 Digital Physical Systems
- IAP 462 Games & Play

INTERESTS + Skills

- MOC Building with LEGO® Bricks
- Media Processing in Art
- Digital/Physical Systems

- Natural Exploration & Photography
- Jugger (5v5 Team Combat Sport)
- Mandarin, Limited Working Proficiency

ARCHETYP CATALOG GENERATOR - 2023-CURRENT:

- Executed full development cycle of Archetyp's catalog generator, an internal tool to dynamically compile product data into a customer-ready, high quality product catalog utilizing p5.js and Commerce7's REST APIs, driving trade sales
- Worked closely with Archetyp sales team to identify and address evolving business needs, successfully delivering multiple major functionality overhauls on short timelines as the business scales
- Generator output has featured centrally in trade meetings and D2C events around the Portland area, as well as tastings and industry events nationally
- In addition to programming work, also collaborated with Archetyp's designer on full catalog layout and design, and have fully assumed control of design work since the original 2023 catalog run, covering the addition of materials for ~40 SKUs and ~15 wineries

Mosaic Generator using LEGO® Bricks - 2022-Current, Intermittent:

Processes photo input into SVG graphics for mosaic MOC instructions using p5.js

- Built as an accompaniment program to Studio's Instruction Maker, the Mosaic Generator takes photo input and processes it into high-quality vector graphics for use in making instructions for custom mosaics built with LEGO® bricks
- Wrote custom functions to efficiently convert full-res photos into 3x2 panel (48x32 stud) designs and graphics, matching any RGB color to its closest equivalent among the approx. 60 colors that LEGO® 1x1 Round Tiles (part #35380) are sold in, ensuring all designs can be built in real life.
- Employed instructions made with its outputs to build and display eight unique mosaics at Bricks Cascade 2023 and 2024

DIJKSTRA'S SHORTEST PATH SOLVER - 2024:

• Applied knowledge of C++, data structures and algorithms to write a map solver capable of determining and outputting the fastest path between any two points in a 150k entry dataset within a few seconds

CLAW GAUNTLET - 2024:

- Designed and fabricated a prototype wearable gauntlet with gesture-controlled retractable claws for costume and prop use
- Utilized a wide variety of fabrication techniques, from 3D modeling and printing to hand-sewing, as well as programming and assembling circuits in the Arduino ecosystem, to create a robust demo product
- In particular, iterated through eight variations on finger-mounted claws to find an optimal design balancing needs of repair access/modularity, strength, and material usage

SCRAP THEREMIN - 2024:

- Built and programmed a contactless instrument using MaxMSP (node-based media arts programming language) and recycled materials
- Wrote highly efficient computer vision programs using the cv.jit library for Max to seamlessly process gestures into music in a multi-octave range, which is then easily processed through any desired effects to fill musical roles from main melody to ambient and organic background sound
- Designed code to be highly flexible and accessible, ensuring compatibility no matter the variation in physical build. If you can build a box with a solid color background, the code can turn your movement over it into music, ensuring you can play without limits

"HORDEKEEP" ART PORTFOLIO - 2024:

 Learned and applied a wide suite of industry tools to develop a concept art portfolio for fictional dark cozy game "Hordekeep", from Photoshop, Illustrator, and After Effects to Blender, 3DS Max, and OpenToonz

PORTFOLIO WEBSITE - 2024:

- Utilized HTML, CSS, and Javascript to build a personal portfolio site from scratch, both as a venue to showcase my work across disciplines, and itself as a showcase of web development and design experience.
- Employed accessibility and reactive design best practices to ensure a smooth and inclusive user experience on the site, and continuing to work to expand access and support, especially in the direction of small format displays such as mobile devices
- View this and most of the above projects in more detail on my portfolio site, linked in underlined project titles or at this link: https://polygeistlll.github.io/portfolio-site/about.html