(801) 828-6960   dallinjlarsen.com   dallin.j.larsen@gmail.com

Dallin Larsen

Full-Stack Engineer with a UX degree, turning complex systems into intuitive user journeys.

UX / Engineering Work Experience

Space Dynamics Laboratory   Logan, UT
Full-stack Software Engineer – UI/UX Designer   June 2021 – Present

Design, develop, evaluate, and maintain business applications for use within the company.

- Led a team of 2-3 engineers on projects that last about 2 to 6 months for customers, from planning and requirements gathering to designing, developing, testing, and releasing custom web applications.
- Design user interfaces and complete usability testing to determine the quality and effectiveness of the user interfaces through usability tests and functional testing feedback.
- Conduct system design of database tables in Postgres and backend frameworks like Node to best fit projects.
- Build applications in Vue with Nuxt.js and Express.js backend.
- Improve the quality and efficiency of algorithms that solve various business logic problems.
- Build relationships with customers to understand business needs and ensure good product fit.

Reformer Pro

UX Designer / Shopify Engineer / Owner / Sales   August 2024 – Present

- Founded and operated an e-commerce store specializing in high-ticket fitness equipment across the United States. To check it out go to reformerpro.com.
- Designed and implemented brand identity, including logo, color palette, and marketing materials, to establish a cohesive and professional online presence.
- Redesigned and extensively customized a Shopify storefront template through front-end development and design, optimizing user experience, enhancing SEO, and driving high conversion rates.
- Built partnerships with premium fitness brands, securing product availability and enhancing the store's reputation.
- Managed all aspects of business operations, including marketing, customer outreach, and sales.

Self-Employed

Full-stack Software Engineer - UI/UX Designer   June – October 2023

- Developed a custom breakfast delivery management app for a boutique hotel in Great Falls, MT.
- Enabled guests to place orders via tablet at check-in, streamlining the order process.
- Led project end-to-end: requirements gathering, UI design, and development using TypeScript, React.js, and Next.js.
- Created training solutions for staff to address high turnover and varied technical skills.
- Achieved streamlined operations and reduced manual errors.
- View project details: Portfolio Link.

Digital Marketer   September – November 2023

- Built a static marketing website from scratch for a local car detailing business.
- Increased customer acquisition by over 10x in less than a month.
- Applied SEO best practices and design techniques to showcase the business and generate leads.
- Utilized Firebase to store leads and integrated SendGrid API to email leads directly to the business owner.
- View the site at detailingbydaniel.com and my process at [Portfolio Link.](Portfolio Link).

Education

Kent State University   Kent, OH

M.S. – User Experience Design, 3.97 GPA   **Graduated December 2023**

- Learned principles of user research, interactive design, prototyping, accessibility, usability, and project management.
- Completed many UI design and user research projects in groups and individually. To view some of them look [here](#).

Utah State University   Logan, UT

B.S. - Computer Science, 3.95 GPA   **Graduated August 2021**

- Learned principles of Data Structures and Algorithms and their applications.
- Gained skills in teamwork, problem-solving, full-stack web development, mobile application development, operating system design, databases, cloud computing, data science, artificial intelligence, and other topics.
- Completed a minor in business where skills in marketing, accounting, MIS, finance, and management were developed.

Summary of Work

Projects
Algo-Trading Bot
February 2020 – Current
- Have built and deployed multiple algorithmic trading applications using Python, integrating with APIs from Alpaca, Coinbase, Binance.US, Kraken, and Interactive Brokers.
- Deployed algorithms using Google Cloud compute engine on a Ubuntu Linux operating system.
- Researched the financial markets and gained a deep understanding of Technical Analysis, Price Action, and Risk Management.
- Utilized Postgres as an algorithm state management tool and used Pandas data frames and other advanced Python libraries.
- Introduced advanced multithreading and multiprocessing to optimize algorithm decision-making within milliseconds.
- Built extensive back testing solutions to test strategies.
- Completed an intensive machine learning study in my senior year of my undergraduate Computer Science degree to determine price action based on chart images.

Space Dynamics Laboratory
Full-stack software engineer - UI/UX Designer
Jun 2021 — Current
- Work with internal customers on building custom software solutions to improve business processes.
- Manage projects by leading development teams of two to three engineers and building customer relationships.
- Design user interfaces and prototypes.
- Conduct focus groups, usability testing, and other user research techniques.
- Build custom software using tools such as Vue.js, Nuxt.js, Node.js, Express.js, Postgres, Docker, Typescript, and others.

1. **Process Document Viewer Web Application**
   - Led a team of three developers to build a custom application for streamlined document search and retrieval related to company business processes
   - Guided the team through all stages: research, requirements gathering, design, usability testing, implementation, and release
   - Developed features enabling employees to quickly locate relevant documents, improving productivity and process adherence
   - Included admin functionality for managing documents, linking them to processes, and adding metadata for enhanced searchability
   - Delivered a user-friendly application that optimized document management and retrieval

     Skills Used: Full-Stack Engineer, Project Manager, UI/UX Designer, Node.js, JavaScript, Vue.js, PostgreSQL, UI/UX, Docker, Express, Nuxt.js, Usability Testing, Docker Compose

2. **HCM Replacement Web Application**
   - Served as the lead designer on a year-long project to replace the company's HCM system with a custom-built solution
   - Established TypeScript standards for the team to ensure code quality and consistency
   - Transitioned the backend to a new framework, Nitro, for improved integration with the Nuxt frontend
   - Collaborated closely with project managers and stakeholders to refine requirements and align with business needs

- Designed and tested interface prototypes to enhance user experience and functionality
- Contributed to both design and development phases for a seamless and efficient system deployment

Skills Used: *Full-Stack Engineer, UI/UX Designer, Node.js, TypeScript, Vue.js, PostgreSQL, UI/UX, Docker, Figma, Nuxt.js, Usability Testing, Docker Compose*

3. **Visitor Check In Management Web Application**
   - Acted as the lead and sole designer for a web application developed for the company's security team
   - Designed a solution to facilitate easy tracking and clearance of visitors to the company
   - Conducted usability testing to validate design decisions, ensuring alignment with user needs and security protocols
   - Maintained close communication with project stakeholders to refine requirements and optimize the user experience
   - Assisted in the development of the application for a streamlined design-to-implementation process

   Skills Used: *Full-Stack Engineer, UI/UX Designer, Node.js, JavaScript, Vue.js, PostgreSQL, UI/UX, Express, Nuxt.js, Usability Testing*

4. **Active Directory Groups Management and Logging Web App**
   - Collaborated with a team of three developers to create a web application for the IT department, streamlining Microsoft Active Directory group management
   - Enabled employees to request addition or removal from groups, with group managers able to review and respond to requests efficiently
   - Integrated LDAP for seamless interaction with the company's Active Directory instance
   - Designed the application to log all group interactions, enhancing tracking and accountability
   - Utilized Postgres for effective data management and logging of application activities

   Skills Used: *Backend Engineer, Full-Stack Engineer, Vue.js, PostgreSQL, Linux, Docker, Express, Nuxt.js, PowerShell, Docker Compose, Active Directory*

5. **Research Conference Administration Web Application**
   - Collaborated with a team of three developers to replace and enhance a web application for the administration of the SmallSat Conference
   - Engaged closely with conference administrators to align the application with their needs and streamline workflows
   - Built a solution to manage the abstract submission, review, and selection process for conference presenters

   Skills Used: *Full-Stack Engineer, JavaScript, TypeScript, Vue.js, PostgreSQL, Docker, Express, Nuxt.js, Docker Compose*

6. **Compensation Management Web Application**
   - Collaborated in the design and development of a web application for the HR team to manage employee pay rates and career trajectories based on performance and experience
   - Co-designed the application with a team designer, focusing on intuitive and effective user experience
   - Conducted usability research to validate and refine the design according to HR needs
   - Implemented advanced mathematical models for accurate payment predictions, enhancing strategic HR decision-making
   - Played a key role in both the design and development phases, ensuring a seamless, data-driven application

   Skills Used: *Full-Stack Engineer, UI/UX Designer, Python, Node.js, JavaScript, Vue.js, PostgreSQL, UI/UX, Express, Nuxt.js, Usability Testing, Pandas*

Self Employed
Digital Marketer
Sep 2023 — Nov 2023

- Built a static marketing website from scratch for a local car detailing business
- Increased customer acquisition by over 10x in under a month
- Applied SEO best practices and strategic design to boost visibility and engagement
- Utilized Firebase to capture and store leads, integrated with SendGrid API for automatic lead notifications to the business owner
- Successfully showcased the business to attract more clients and drive growth
- View the live site here: detailingbydaniel.com
- For a detailed look at my process, view the project here: https://dallinjlarsen.com/projects/detailing-by-daniel/

Skills Used: *Digital Marketer, Firebase, Tailwind CSS, Google Analytics, Git, Netlify, Alpine.js*

Self Employed
Full-Stack Software Engineer / UI Designer
Jun 2023 — Oct 2023

- Developed a custom breakfast delivery management application for a high-end boutique hotel in Great Falls, MT
- Enabled guests to place breakfast orders via tablet at check-in, enhancing guest experience
- Provided hotel staff with an efficient system to manage orders, coordinate with a local bakery, and optimize delivery logistics
- Led the project from start to finish, including requirements gathering, UI design, and development
- Built the application using TypeScript, React.js, and Next.js for a seamless and robust user experience
- Created tailored training solutions for hotel staff to address high turnover and varying technical skills
- Improved operational efficiency and reduced manual errors through streamlined processes
- For a detailed look at my process, view the project here: https://dallinjlarsen.com/projects/gibson-hotel-breakfast/

Skills Used: *Full-Stack Engineer, Project Manager, UI/UX Designer, TypeScript, Next.js, UI/UX, Firebase, Technical Writing, Design prototyping, Progressive Web Apps*