# Madeline Ashley | Full-Stack Software Engineer

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#### **SUMMARY**

Fueled by curiosity and an unrelenting desire to build and discover, I've spent over a decade dissecting complex technical problems in the Biotech and AEC (Architecture, Engineering and Construction) industries. My current aim is to integrate my technical expertise into the strong interest I have in the arts; to solve interesting problems by building uniquely beautiful products that delight and inspire users.

#### **TECHNICAL SKILLS**

HTML | CSS | Javascript | React | Node.js | Relational & Non-Relational Databases | Express | Git | Github | Python | Deployment | Regex | Atlassian Suite | Lab Automation & Robotics | Device Control & Drivers | 3D Modeling & Printing

#### SOFTWARE ENGINEERING PROJECTS

LITTERLOGIC | Custom | OT device + PERN Stack Concept App - Solo Project Live App | Github

Designed, built, and deployed both a wifi-enabled arduino motion sensor + illuminated lavatory sign and a full stack app serving as a Litterbox usage tracker.

REVINYL | PERN Stack Concept App - Group Project Live App | Github

Designed, built, and deployed a full stack app serving as a mock eCommerce platform and personal vinyl tracking library for audiophiles.

MEET YOUR MAKER I MERN Stack Concept App - Solo Project Live App | Github

Designed, built, and deployed a full stack app serving as a mock directory and project showcase for local creators and makers.

**FLASH** I Interactive Browser Game - Solo Project <u>Live App</u> | <u>Github</u>

Designed, built, and deployed a fully-functional Simon-inspired game using HTML, CSS, and Javascript.

#### **WORK EXPERIENCE**

**Automation Reliability Engineer, Lab Automation Engineer** *Invitae* 

San Francisco, CA 2020 - 2022

- Built and launched into Production 4 Automated lab systems comprising 15+ independent devices by floor-planning, installing/unifying instrumentation and adapting system procedures and scripts to suit purpose.
- Steered a company-wide project to standardize a fleet of over 50 lab PCs and upgrade connected instrumentation. Eliminated lab dependence on EOL operating systems, thereby mitigating security vulnerabilities.
- Overtook a 100-unit production run of proprietary image capture devices used by domestic and international sample accessioning teams. Sourced device components per schematic design and budget constraints. Created long-term equipment tracking strategy and technical documentation to ensure program longevity. Deployed capture software to clients using Desktop Central.
- Built and maintained multiple team dashboards to streamline Jira Ticket Assignment, clarify delegation of tasks, and improve data visualization. Used tableau to track lab trends, and implement strategies to minimize instrument downtime.
- Acted as PagerDuty administrator for a team of 20 automation engineers. Configured equipment services and event rules for efficient incident management, and downstream data visualization, assigned user schedules and maintained escalation policies to ensure timely response to equipment failures.

- Supported annual, quarterly and biweekly product release cadences as liaison between Tech Support,
   Engineering and Product teams. Using Agile methodologies, collaborated with multiple teams to drive prioritization of bug fixes and feature enhancements within Bluebeam's suite of offerings. Provided data-based input on issue prioritization in weekly grooming meetings.
- Validated user-reported application issues and identified root causes in product source code. Supported investigations by analyzing data hosted in connected AWS databases and network tracing applications.
- Led bi-weekly pulse meetings with Senior Technical Managers to gauge customer sentiments on the product, and illuminate pain points experienced by customer support teams. Communicated findings to Engineering and Product Teams for further action.
- Participated in rigorous product testing in preparation for periodic releases.
- Served as first-in-command during acting manager's 4-month leave, taking on additional duties to lead team of 5.
- Led a 12-person committee responsible for training internal teams to support new technologies and emerging products/product features.

## **Field Automation Engineer**

Covered territory spanning the US & Canada 2012 - 2015

Tecan Ltd

- Executed between 2 and 7 site visits per week Installing FreedomEVO robotic liquid handling platforms in a wide variety of job-sites including but not limited to: pharmaceutical labs, academic research institutions, government facilities and emerging tech companies.
- Diagnosed hardware and software issues via on-site testing, wrote custom scripts to suit customer-defined automation tasks, provided ongoing post-installation application support.
- Provided tailored customer training on liquid handling platforms and plate reading instruments.
- Operated Independently, visiting a wide variety of users and job-sites across the US and Canada traveling 5-6
  days a week on short notice, keeping an appropriate parts inventory, and reviewing schedule and responsibilities
  continuously based on projected tasks and their priorities.

### **EDUCATION**

#### Certificate, Software Engineering

Remote

General Assembly

09/2022 - 12/2022

• Full-stack software engineering immersive student in an intensive, 24-week, 450+ hour program focused on product development fundamentals, object-oriented programming, MVC frameworks, data modeling, and team collaboration strategies. Developed a portfolio of individual and group projects.

### Bachelor of Science, Biology

Chicago, IL 2004 - 2008

Depaul University
Chicago, IL

Dean's List, Woman of Spirit and Action Award 2006