




# PARRIS BALLENTINE

North Andover, MA 

At Request 

parris@parrisballentine.com 

## PRINCIPAL ENGINEER

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### EXPERIENCE

SYMBOTIC LLC  
JAN 2021 - PRESENT

#### Principal Engineer - Industrial Controls Systems

Lead engineer responsible for building simulation models to guide conceptual work through final product design. Mechanical and controls expert to condense overall design cycle, analyze inefficiencies, validate solutions, and increase confidence given tight project deadlines. Used visualizations to communicate companywide understanding of behavior and win approval of one of the world's largest retailers.

Created new emulation environments with physics engines to unlock rapid controls development in parallel to mechanical design. Primary mechanical engineer to create CAD models for emulation platform, dictated control interface standards, and troubleshoot PLC code to implement more fault tolerant logic. The virtual emulation platform is now on the critical path as the company scales up.

SYMBOTIC LLC  
JAN 2020 - DEC 2020

#### Senior Engineer - Research and Development

Led a major project that demonstrated the first full stack testing environment in company history that included system software, industrial controls and robotic hardware. Delivered a Jenkins-based CI pipeline for industrial controls testing, while directing an international team of devops engineers in its development.

Reverse-engineered existing systems, developed detailed documentation to model and "virtually commission" those systems. Detected bugs six months prior to product releases and resolved issues between mechanical, electrical, and controls systems.

SYMBOTIC LLC  
SEPT 2019 -  
DEC 2019

#### Advanced Engineer - Research and Development

Lead engineer to design and build proof of concept high fidelity testing landscapes with a focus on low-level virtual hardware models. Promoted project within company, used cross-functional expertise (non-reports) to build out vision. Used testing landscapes to evaluate performance, discover defects, and test fault recovery methods.

SYMBOTIC LLC  
MAY 2018 - AUG 2019

#### Product Owner/Project Manager - Hardware Product Engineering

Product Owner for two major installed automation lines. Coordinated onsite cross-functional projects to improve performance, reduce errors and bring products to customer acceptance level. Led weekly meetings with largest customer account to update on company initiatives and critical project milestones.

SYMBOTIC LLC  
JAN 2017 - APR 2018

#### Project Engineer - Hardware Product Engineering

Engineer, acting Scrum Master, and Project Manager of cross-functional team responsible for hardware and industrial controls of material handling systems. Kept team focused, on track, and productive by holding daily standups, sprint reviews, and retrospectives. Created and tracked project plans (MS Project) and sprint work (JIRA) while filling in engineering gaps.

GOSS  
INTERNATIONAL  
JUN 2013 - DEC 2016

#### Project Engineer

Successfully demonstrated proof of concepts through product research, prototype testing, and documentation. Interfaced with new and existing vendors to generate new products and processes. (U.S. Patent No. 9,878,531).

GOSS  
INTERNATIONAL  
JUN 2011 - JUN 2013

#### Design Engineer

Improved Goss' knowledge and capabilities of offset lithographic printing on packaging industry materials (PET, HDPE, LDPE). Developed Goss' standard testing procedure to quantify substrates and determine roll-to-roll press parameters.

Configured Goss' pre-press workflow to create a repeatable and reliable computer-to-plate (CTP) process. Designed artwork, prepped presses for engineering tests and live customer demos (press calibration, color management).

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### EDUCATION

UNIVERSITY OF NEW  
HAMPSHIRE  
SEPT 2007 -  
MAY 2011

#### B.S. Mechanical Engineering

Senior Project: Team of four engineers analyzed, designed, and constructed an electromagnetic forming (EMF) machine

ASME - Vice President, Lambda Chi Alpha - Vice President & Educator