



Christopher W. Blake

Software Excellence + Engineering Heart + Systems Thinking



ENGINEERING SKILLS

General

Prototyping	Research and Development
Design for Assembly/Config	Design for Manufacturing
Lab Testing	Product Development
Product Engineering	Product Testing
Process Optimization	Process Automation
Systems Engineering	Tolerancing / GD&T

Analysis

ANSYS (FEA)	Matlab
SimuLink	LabView
Design of Experiments	Root Cause Analysis
Functional Decomposition	Custom Written Software

CAD / Design

Unigraphics (NX6)	Solidworks
Catia V5	Creo (Pro-Engineer)
Inventor	AutoCAD
Teamcenter PLM	

Mechanical

Dynamics	Statics
Fluid Dynamics	Thermodynamics

Electrical

Opto-Electronics	Chip Manufacturing
Chip Packaging	Arduino

GENERAL SKILLS

Management

Interdisciplinary Collaboration	International Collaboration
Topic Ideation	Project Task Decomposition
Detail Oriented	Fast Learning
Stage Comfortable	Technical Writing
Scientific Writing	Teamcenter PLM
Git Version Control	GitHub Org Owner

Documentation

PowerPoint	Word
Excel	Access
Photoshop	SharePoint
LaTeX	Markdown
GitHub Pages	

Operating Systems

Mac	Windows
Linux / Unix	

PROGRAMMING SKILLS

General

Analysis Automation	Artificial Intelligence
Scientific Computing	Data Analytics
Full Stack	Functional Decomposition
Machine Learning	Microservices
Multi-Criteria Decision Making	

Languages

.NET - Core	.NET - Standard
.NET - WinForms	ASP
C	C#
HTML	JAVA
Javascript	JQuery
JSON	Matlab
REST	Python
PHP	SPARQL
SharePoint	SQL
VB	VBA (Macros)
XML	XSL

Machine Learning & Artificial Intelligence

Adaptive Resonance Theory	ANT Algorithm
Artificial Neural Networks (ANN)	Classification
Clustering	Convolutional Neural Networks
Decision Trees	Fuzzy Logic
Genetic Algorithms	Gradient Descent (various)
Hierarchical Clustering	K-Means
Markov Decision Process (MDP)	N-Gram
Penalty Functions	Principle Component Analysis (PCA)
Regression	Reinforcement Learning
Simulated Annealing	Supervised Learning
Support Vector Machines (SVM)	Unsupervised Learning
(... and much more...)	

EVENT COORDINATION SKILLS

People and Schedule

Volunteer Management	Volunteer Recruiting
Calendar Planning	Budget Planning

Marketing

Emailing / Flyers	Outreach / Drives
Final Cut Pro (Video Editing)	Camera Comfortable
"People Skills"	

Logistics

Day-Of Coordination	Stage Comfortable / MC
Report Summarizing	Event Scaling
Event Debriefing	Surveying / Feedback