

# DAN CHRISTENSEN

## ENGINEER/CHAMELEON

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### WHAT I'VE DONE

#### CUSTOM SOFTWARE/ HARDWARE

Nov 2014-Present

#### CUSTOM DESIGN/ CRAFTSMAN

Dec 2012-Present

#### DESIGN ENGINEER

Sept 2007-May 2009

### WHERE I LEARNED THINGS

#### SOUTH DAKOTA SCHOOL OF MINES & TECHNOLOGY

Aug 2003-May 2007

#### MINNESOTA SCHOOL OF PIANO TECHNOLOGY

Sept 2008-Nov 2008

#### METROPOLITAN STATE UNIVERSITY OF DENVER

Dec 2009-Dec 2012

### MY SPECIFIC SKILLS

- Proactively **learning and growing** skills for any given project
- Seeing obstacles and unknowns as puzzles to be solved
- Working with microcontrollers: **Arduino/Teensy/Axolotl Core**
- Programming: **C/JavaScript/VBA**
- Building quick mockups to test ideas (both physical and virtual)
- 3D Modeling/2D drawing: **Solidworks**
- Fabrication using various materials
- Photo/Document editing: **Photoshop/Inkscape/MS Office**

### MOST RELEVANT SKILL

#### Quick-learning chameleon

As an example, I started with almost no experience coding in Excel, but delivered a program powerful enough to impress my client's own IT department.

#### INDEPENDENT CONTRACTOR (NC,CO)

Work closely with clients to provide custom creative and unique solutions, including designing and building interactive signage along New Belgium's tour route, coding a cubic spline interpolator for a developing snowboard game, and creating complex Excel Workbooks for custom data and reporting solutions.

#### Hands-on dexterity

Working with power and hand tools, building custom jigs, and achieving precision.

#### NEXEN GROUP, INC. (MN)

Performed engineering changes, customized existing products, and designed new products. This involved creating and editing 3D/2D models and drawings, performing mathematical and FEA analysis, building and testing prototypes, and writing product specifications.

#### Working with a team

Coordinating with other engineers and departments to complete complex projects and tasks in an effective and timely manner.

#### MECHANICAL ENGINEERING (BSME)

I completed various math, physics, circuits, mechatronics, and programming courses. Above all, I learned universal skills of problem solving and the ability to quickly learn and absorb new tools into my engineering toolbox.

#### PIANO TUNING AND REPAIR

Hands-on instruction in maintaining, repairing, and tuning pianos (Defebaugh tuning method).

#### MUSIC COMPOSITION

Music theory, notation, ear training, arranging, writing for specific instruments, cello performance, basic playing skills for strings, woodwinds, brass, and percussion.

### MY INTERESTS/HOBBIES

**Synthesizers** I'm building an eight-voice polyphonic synthesizer on a microcontroller. My current build has about 4,500 lines of code.

**Playing cello and piano**

**Rock climbing, biking**

**Puzzle games** One of my favorites is *The Witness*.

**Combining my interests across fields in weird projects**

On any given day I might sketch out designs, code physics equations, work with power tools, or create wind sounds for a video game, and I love that variety.

**Cooking** Usually involving spicy peppers and cheese.