

# THOMAS RYAN

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LinkedIn: <https://www.linkedin.com/in/tmryan3>

Portfolio: <https://tmryan.github.io/>

## SUMMARY

Software Engineer looking for interesting and challenging development opportunities, especially those involving C++. Will learn quickly and expand skill set to meet the needs of the team.

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## EDUCATION

Sep 2015 – May 2017

**San Jose State University**

San Jose, CA

*Bachelor of Science in Computer Science (GPA 3.67)*

- Dean's Scholar, Graduated Cum Laude

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## EXPERIENCE

April 2019 – Present

**Garmin**

Greater Los Angeles Area, CA

*Software Engineer*

- Implement and maintain business logic for HMI using C++
- Develop HMI for Garmin products using Qt5 and QML
- Work as part of a large team of developers in an Agile setting
- Collaborate with teams distributed around the world

Nov 2017 – April 2019

**Amazon**

Irvine, CA

*QA Engineer for Lumberyard (contract via TEKsystems)*

- Debug issues in a very large multithreaded C++ code base for platforms such as Windows, Linux, MacOS, iOS, Android, PlayStation, and Xbox
- Create automation and contribute to a library of Python automation utilities
- Automate daily tasks in Python like syncing with P4, building, downloading package builds
- Collaborate with other engineers as part of a multi-disciplined team in an Agile setting

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## SKILLS

Technical

Confident with C++, Python

Comfortable with OpenGL/GLSL, C, QML, Qt framework, C#, Java

Tools

Git, Perforce, MS Visual Studio

Windows, some Linux and Mac

Unity, Lumberyard

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## PROJECTS

Cloth Simulation

Webpage: <https://tmryan.github.io/clothSim.html>

Source code: <https://github.com/tmryan/ClothSim>

- Cloth physics simulation using mass-spring model with gravity, wind, and collision
- OpenGL and C++

Color Picker	Webpage: <a href="https://tmryan.github.io/colorPicker.html">https://tmryan.github.io/colorPicker.html</a> Source code: <a href="https://github.com/tmryan/QtColorPicker">https://github.com/tmryan/QtColorPicker</a> <ul style="list-style-type: none"> <li>• Color picker written in C++ using the Qt framework</li> </ul>
inQ Engine	Webpage: <a href="https://tmryan.github.io/inq.html">https://tmryan.github.io/inq.html</a> Source code: <a href="https://github.com/tmryan/inQ">https://github.com/tmryan/inQ</a> <ul style="list-style-type: none"> <li>• Game engine written in Java</li> <li>• AWT toolkit for graphics</li> </ul>
SuperClicky	Webpage: <a href="https://tmryan.github.io/superclicky.html">https://tmryan.github.io/superclicky.html</a> Source code: <a href="https://github.com/tmryan/SuperClicky">https://github.com/tmryan/SuperClicky</a> <ul style="list-style-type: none"> <li>• Memory game made with inQ engine (Java)</li> <li>• 7 randomly generated levels</li> </ul>

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## COURSES

SJSU & Coastline  
Jan 2014 – May 2017

### San Jose State University

CS 116B – Computer Graphics Algorithms  
 CS 166 – Information Security  
 CS 158A – Computer Networks  
 CS 155 – Introduction to the Design and Analysis of Algorithms  
 CS 149 – Operating Systems  
 CS 108 – Intro to Game Studies  
 CS 160 – Software Engineering  
 CS 157A – Database Management Sys I  
 CS 154 – Formal Languages & Computability  
 CS 152 – Programming Paradigms  
 CS 151 – Object-Oriented Design  
 CS 146 – Data Structures and Algorithms  
 CS 147 – Computer Architecture  
 MATH 161A – Statistics  
 MATH 129A – Linear Algebra  
 MATH 42 – Discrete Mathematics

### Coastline Community College

MATH C280 – Calculus 3

### Santa Barbara City College

CS 145J – Intro to Data Structures  
 CS 131 – Assembly Language Programming  
 CS 140 – Object Oriented Programming Using C++  
 CS 120 – Java Programming  
 MATH 150 – Calculus w/ Analytic Geometry I  
 MATH 160 – Calculus w/ Analytic Geometry II  
 PHYS 121 – Mechanics of Fluids and Solids