



contact

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site link

www.elliottcattell.com

languages

proficient with:
python, c++, c, java, qt

some experience with:
c#, glsl, sql, unix shell
scripting, erlang,
javascript, and nasm &
mips assembly languages

software

unix, vim, eclipse, .net,
maya, menv, slim, avid,
katana, adobe suite

cinematography

director of photography
for a dozen short films
shot on red and sony f65

Elliott Cattell

summary

Elliott Cattell is a software engineer and technical director skilled in building maintainable, efficient, and user-oriented applications for feature animation. His experience includes:

- the design, implementation, and deployment of studio tools and pipelines
- digging into large, established codebases to optimize existing software
- using iterative, UX-informed design to provide utility and ease of use to studio tools

experience

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| 9/16 – Now | Pixar Animation Studios
Technical Director, Global Technology
Emeryville, CA |
| | <ul style="list-style-type: none">• Working with creative and technical leads to develop software for Pixar's render, lighting, and shading pipelines. |
| 6/15 – 8/16 | Blue Sky Studios
Production Engineer
Greenwich, CT |
| | <ul style="list-style-type: none">• Added posed rig support, multithreading, and other improvements to SVO proxy pipeline.• Designed and built asset performance benchmarking framework.• Rebuilt and parallelized our asset creation software, increasing speed by an order of magnitude. |
| Summer 2014 | Blue Sky Studios
Production Engineering Intern
Greenwich, CT |
| | <ul style="list-style-type: none">• Proposed and developed prototype of Maya-integrated lighting interface.• Engineered universal documentation converter to migrate all in-house documentation from Drupal MySQL database to Atlassian Confluence.• Optimized UV and mesh validation algorithms in our Maya-integrated asset verification software. |
| Summer 2012 | Pixar Animation Studios
Technical Undergraduate Intern
Emeryville, CA |
| | <ul style="list-style-type: none">• Completed a variety of TD projects within Pixar's production pipeline, including lighting, layout, rigging, and simulation.• Collaborated on a group project with two other interns, pushing a scene from concept to final render in one week. |

education

- | | |
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| May 2015 | Chapman University
B.F.A. in Film Production, Minor in Computer Science
Additional computer science study (17 courses at Chapman and Stanford)
President, Chapman University ACM Chapter (Fall 2014)
3.89 GPA
Orange, CA |
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notable projects

Physically-Based Ray Tracer (C++) - Wrote Monte Carlo renderer independent of third-party libraries. Features include global illumination, stratified soft shadows, physically-based depth of field, reflections, textures, anti-aliasing, TIFF encoding, and BMP decoding.

Adam of the Sheetlands (Director, short film) - Led a multi-functional team of 38 people. Managed a budget of \$15,000 raised through crowdsourced funding platforms.

3D Material Painter (Java) - Designed and wrote native Android application for painting textures onto models. Developed mobile-optimized OpenGL ES graphics engine.

Simulation of Packet-Routing within Massively Parallel Neural Networks (Java) - Engineered a simulation to demonstrate the shortcomings of packet-routing as an alternative to direct hardware implementation of neural pathways.