



# Julian V V Ceipek

julian.ceipek@gmail.com

Remote/Hybrid - Boston, MA

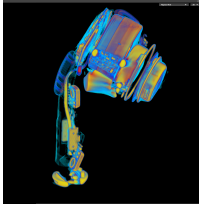


I craft **systemic solutions** with & for **people**. Software that's **usable**, **extensible**, **fast**.  
I love **learning**, **collaborating** & **teaching**.

## EMPLOYMENT

2020-2023

**Lumafield. Senior Software Engineer (5-11/2023), Software Engineer (6/2021-5/2023), Contractor (12/2020-6/2021).** Developed critical solutions – volumetric renderers, touchscreen interfaces, hardware drivers, embedded software, firmware, and server backends – that empower manufacturers with the affordable and accessible X-ray vision they need to create more reliable, cheaper, more sustainable products.



- Enabled Lumafield's expansion into new market segments with high-volume inspection requirements; combining systemic redesigns with low-level SIMD optimizations to reduce X-ray scan times from hours to minutes while increasing data quality.
- Helped customers save hundreds of thousands of dollars by creating the core WebGL2 renderer they use to inspect products and prototypes for internal defects.
- Led 75% variable cost reduction project to move the 3d reconstruction pipeline from AWS servers to on-scanner CPU+GPU compute for high-volume customers.

2020-2021

**Lynxtool. Founding Engineer.** Created Pixar-inspired technologies to visualize the hidden workings of spreadsheets with a friendly web-based programming tool. Company acquired by Figma.

- Designed, implemented, and documented an in-browser rendering engine and user interface toolkit optimized for Lynxtool's unique layout and interaction requirements.
- Enabled users to seamlessly view and edit million-row datasets in the browser by extending Lynxtool's LLVM compiler backend with recording and on-demand data streaming.
- Collaboratively designed and implemented new user interface paradigms for viewing and editing intermediate calculations.

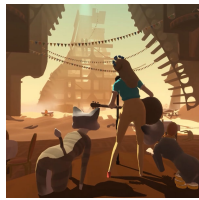
2019-2020

**Dark. Engineer.** Led initiatives to unify user experience of revolutionary "live" programming environment for backend programmers, with goal of making coding 100x easier.

- Developed, documented, and tested standard toolkit with which customers build software used by tens of thousands of end users.
- Eliminated the biggest drain on developer resources by re-architecting Dark's unique structured code editor to consistently match user expectations.
- Coached early adopters through coding their first Dark programs over video calls, identified customer pain points through regular interactions, and implemented features and fixes to address their needs.

2015-2019

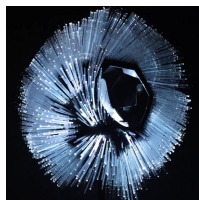
**Tender Claws. Tech Co-lead.** Created foundational game systems, in-house tools, native plugins, custom servers, and prototypes for critically-acclaimed AR and VR experiences supported by Google and Oculus.



- Developed prize-winning first prototype and core multiplatform architecture for award-winning VR game Virtual Virtual Reality, with 50k+ installs and majority 5-star ratings.
- Spearheaded and led development of multiplayer services and backend infrastructure for virtual reality live theater experience showcased at Sundance Film Festival and backed by Oculus.
- Amplified the efforts of my talented collaborators; learning, using, and teaching languages, techniques, and pre-release technologies as needed.

2015-Present

**Studio Farahi. Software Contractor.** Create the "brains" for interactive garments and installations backed by Adidas, Steelcase, and Chicago's Museum of Science and Industry; and featured by outlets including WIRED, CNN, The Guardian, BBC News, Engadget, and CNET.



- In under 130 hours, engineered complete simulation suite, control system, and wifi monitoring portal for display case that reacts to human emotions. Project presented to executives at Adidas headquarters.
- Built visual calibration tool for 30 second servo motor tuning (despite no prior servo experience).
- Achieved 20x performance boost for generative animations using game development tricks.

2014-Present

**Entrepreneur. Co-founder & Tech Lead.** Co-designed and developed multiplayer arcade game featured at the highly selective E3 Indiecade Showcase.

2013

**Codecademy. Engineer Intern.** Designed, developed, and user-tested the initial prototypes for the project-based programming lessons that are now central to the company's subscription model.

- 2012 [Riparian Data](#). *Developer/Designer Intern*. Developed production code for browser-based enterprise email client and co-designed the user experience.
- 2011 [Lexis Nexis](#). *User Experience Research Intern*. First to integrate speech recognition into iPhone app for lawyers.

## EDUCATION

---

- 2014-2017 [USC School of Cinematic Arts](#), Los Angeles, CA  
GPA 3.93. MFA in Interactive Media and Game Design
- 2010-2014 [Franklin W. Olin College of Engineering](#), Needham, MA  
GPA 3.93. BS in Engineering with a computing concentration

## NOTABLE ACHIEVEMENTS

---

Tendar [[link](#)]  
Winner, Innovation in Interaction, [IndieCade 2018](#) | Official Selection, [Sundance New Frontiers 2018](#) |  
Official Selection, [IDFA Doc Lab 2018](#)

Virtual Virtual Reality [[link](#)]  
Best VR Game, [International Mobile Gaming Awards 2018](#) | Best VR Experience, [Google Play Awards 2017](#) |  
Best Mobile Interactive Experience, [Raindance Film Festival 2017](#)

Awarded [USC Annenberg Graduate Fellowship](#)

1st place for educational video, [Ars Science Video Contest](#), physical sciences division [[link](#)]

1st place award for 3d model, [Weta Workshop](#) (SFX group for Avatar and Lord of the Rings) [[link](#)]

Lead antagonist in first authorized stage adaptation of [Dr. Horrible's Sing-Along Blog](#)

## DIGITAL TOOLS

---

Primary prototyping languages: [TypeScript](#) and [Python](#).

Developed non-trivial programs in C#, Go, C/C++, Objective-C, OCaml, Odin, LISP, SML, MATLAB, BASIC, JavaScript, Java, and LabView. Often experiment with new languages.

Adept with [Unity](#), [Inkscape](#), [Blender](#), [Final Cut Pro](#), and [Photoshop](#) for 5+ years.