CV - Erik Svedäng

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Summary

I'm an independent game developer and freelance programmer with a big interest in programming languages, systems design, user interfaces, and functional programming. I've worked on a wide range of projects, both on my own and for various clients. With 15+ years of experience, I bring a unique and balanced perspective into technical discussions.

Professional History

Teaching at the University of Skövde (september 2007 - january 2010)

I worked part time, first as a student and later as an alumnus, teaching courses on game design and rapid prototyping.

Blueberry Garden (2009)

This single player adventure game tried to innovate interactive story telling in various ways. It started as my final thesis at the game design program at the University of Skövde and then went on to win multiple awards. It was released on Steam a year after my graduation. Design, art and programming by me, music by Daduk.

Tech: C#, XNA

Kometen (2010)

A game made for iPhone and iPad, where you explore a universe filled with art. Made in collaboration with artist & musician Niklas Åkerblad (El Huervo). I did the design and programming.

Tech: Objective C, Cocos 2D

Shot Shot Shoot (2010)

A real time board game for two players. Solo project, released for the original iPad.

Tech: C++, OpenFrameworks

TRI-TRI-TRIOBELISK (2011)

An extended version of Shot Shot Shoot with more game modes, power-ups, etc. Made in collaboration with musician and UX designer Shelby Cinca.

Tech: C++, OpenFrameworks

Clairvoyance (2012)

An online head-to-head board game about predicting your opponent's moves, kind of like chess but with simultaneous moves. This game never got out of beta, but created a passionate community of players while the server was running. Made in collaboration with Johannes Gotlén (programming), Niklas Åkerblad (art) and Oscar Rydelius (sound & music).

Tech: C#, Unity, Python, Django, Heroku

Wall projection I.R.I.S, Slussen, Stockholm (2012)

This was a contract work for film maker Jesper Wachtmeister where people could send text messages to have text appear on the wall of a museum in central Stockholm. I did all the programming for the project.

Tech: C#, Unity

Teaching at IT-universitetet Göteborg (2014 - 2018)

Each spring semester I taught iOS app development in Objective C and Swift.

Development of iOS app for ProgramDuon AB (2015)

I developed an iOS app for their digital device management (MDM) application DuoStation.

Tech: Objective C

Else Heart.Break() (2015)

My biggest game project to date, which took approximately 5 years to complete. My roles were project manager, game designer, lead programmer and writer. We got funding twice from the Nordic Game Program, which covered part of the development costs, the rest was funded privately by the team. Made in collaboration with Johannes Gotlén (additional programming), Niklas Åkerblad (art), Tobias Sjögren (art), and Oscar Rydelius (sound & music). The game features a complete programming language ("Sprak") designed and implemented by me. Internally, the project also made use of another scripting language of mine ("Grimm") to control the story and dialogue of the game. Released on Steam, GoG and Humble Store. A lot of the code was also open sourced on Github.

Tech: C#, Unity

Carp (2016 - ongoing)

Born out of frustration with current tools for digital game making — and a love for the Lisp family of languages — I invented Carp. It's a programming language designed with game making in mind, focused on speed and predictable performance. The first version of the compiler was made in 2015 - 2016 using C and it attracted a fair bit of attention in the Lisp / functional programming community. In the spring of 2017 I rebooted the project, this time using Haskell for the implementation. The project is open source and available at Github (+5000 stars). It has had many contributions over the years and a handfull people joined the core team, helping out with the implementation of the standard library, documentation and bug triaging.

Tech: C, Haskell

Teacher of Game Design, University of Skövde (Fall 2017)

I worked 50% teaching game design, narrative design, and rapid prototyping.

A Series of Interesting Choices (2018)

A board game for practicing game design. Each players get some secret objectives with mechanics that they must include in a (short) game that they design on the spot. After playtesting all the games, players try to guess which mechanic belongs to what game. Has been used at various game design educations and workshops. Self published.

Krystall (2019)

Contract work for the University Museum of Bergen, implementing an interactive simulation of how crystals form. Made in collaboration with museum exhibition designer Adam Bartley.

Tech: C++, OpenFrameworks

Senior programmer at Coherence (May 2020 - Aug 2023)

Coherence is a startup trying to make it easer for developers to create multiplayer online games. They provide a project-agnostic server solution and a SDK. I was one of the early employes at the company and I worked on many parts of the system, including the server (written in Go), and the Unity SDK (C#). Among other things I implemented an integration testing framework that let people create simulations of multiple clients interacting using a domain specific language. I was also part of a subcontract with a big international client, adding support

for a Roblox-like code execution model in a networked game that supported user generated content and user-level visual programming.

Tech: C#, Unity, Go, Python

Manahex (2024)

Manahex is an online card game made for 2 - 4 players which supports both asyncronous and realtime play. The game client communicates with a generic board game server designed and implemented by me, which runs in the cloud. I made the art, sound, programming and design. Released on Steam.

Tech: Rust, Macroquad, Rocket, Postgres, Linode

Education

Bachelor of Arts in Game Design

University of Skövde (180 hp, September 2005 – June 2008)

Other courses

- Mathematics I (30 hp, MMG200)
- Educational Game Design (7.5 hp, PDG678)
- History of Aesthetics, Introductory course (7.5 hp, IL1108)
- Artistic creativity in electronic music (7.5 hp, LJG004)
- Synthesizer programming (7.5 hp, F0129G)
- Introduction to programming in Python (7.5 hp, A237TG)
- Introduction to Graphic Design (7.5 hp, GD204F)
- 3D-Modeling and Animation in Open Source Environments (7.5 hp, DVG019)
- Creative Writing A: The Art of Storytelling (15.0 hp, 1KS004)

Core technical skills

Rust, C, C#, C++, Go, Haskell, Clojure, Objective C, Swift, Python, Javascript, Unity, Godot, Aseprite, Photoshop, Blender, Sketch, Postgres, HTML, CSS, Bash, Unix, Linux, Emacs.

Other skills

Game design, project management, graphic design, illustration, watercolor painting, web design, music production, English, Swedish.

Awards

- Blueberry Garden, Best Innovation, Swedish Game Awards (2008)
- Blueberry Garden, Seamus McNally's Grand Prize, Independent Games Festival (2009)
- Talent of the Year, Swedish Computer Game Industry Award Show (2010)

Museum Exhibitions

- Mediateca Expandica, Madrid, Spain (2009)
- Art Center Nabi, A.L.I.C.E. museum, Seoul, South Korea (2009)
- FILE Games, Sao Paulo, Brazil (2010)
- Mansedanse Play!, Tampere, Finland (2010)
- Hjärta Spel, Linköping, Sweden (2012)
- Game Masters Exhibition, Sydney, Australia (2013)
- Hjärta Spel, Tekniska Museet, Stockholm, Sweden (2013)
- Game Masters Exhibition, Halmstad (2015)

Public Speaking

- Creating Blueberry Garden, Assembly, Helsinki (2009)
- A discussion about Blueberry Garden with David Surman, Bradford Animation Festival (2009)
- Three Games I've Made, Projektledning Inriktning Spel, Gothenburg, Sweden and Mansedanse Play!, Tampere, Finland (2010)
- A panel discussion about mobile games, Nordic Game Conference, Malmö (2011)
- Inspirational Talk, Blekinge Tekniska Högskola, Karlshamn (2012)
- Creating Clairvoyance, University of Skövde (2013)
- On Being an Indie Game Designer + Creating Clairvoyance, Chalmers (2013)
- The Architecture Behind Else Heartbreak, Chalmers University of Technology (2014)
- Designing Slice & Dice, University of Skövde (2014, 2015, 2016)
- How I tell stories in games, Neuchâtel International Fantastic Film Festival (2015)
- Narrative Design in Else Heart.Break(), Practice @ NYU Game Center, New York City (2015)
- Applying Board Game Aesthetics to Videogame Design, Chalmers University of Technology (2023)
- My Life as a Game Designer, Chalmers University of Technology (2023)

Podcast Appearances

- Kodsnack #223 - "Jag har precis blivit frilansare" (2017)
- Functional Geekery Episode 96 - "Erik Svedäng" (2017)
- Functional Futures (Serokell) - "Carp with Erik Svedäng" (2022)

Event Organizing

No More Sweden, various locations (2008 - 2018)

This was a game jam that I co-created and co-organized for about 10 years. It was wildly popular hitting our cap of 100 participants some years.

Co-organizer and speaker at Got.Lambda (2012 - 2019)

This is a very popular Meetup group in Gothenburg (+1000 members) with topics about anything related to functional programming.

Unity Game Development courses, Gothenburg (2013 − 2016)

This was an attempt to teach Unity and game development to the public, including school kids as young as 10 years old. Made in collaboration with game designer and programmer Edvard Rutström.

Game Design Study Circle, Lindholmen (2016)

This study circle was put together by me and had a group of students and professional game designers meet once a week to try various board and card games from throughout history.

Halmstad Functional Programming meetup group (2022 - ongoing)

Due to the lack of lectures and interest about functional programming in the city where I'm currently located, I created this Meetup group. We meet at the Devoteam offices in central Halmstad and have had lectures about Haskell and Rust.