

# Alan Haug

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<https://alan-haug.github.io>

## Skills

- C, C++, C#, Java
- HTML, CSS, Javascript
- Visual Studio, IntelliJ, Android Studio, Eclipse, Netbeans
- Unity Game Engine, PICO-8 Fantasy Console
- Audio (musical & sound FX)
- Scrum & Agile Methods
- SVN, Git, Perforce
- Windows environments
- GIMP (image editor)

## Familiarity

- Python, Lua, MySQL, Node.js
- some Assembly
- XNA, SFML, Nginx
- Arduino, Game Boy, Kinect, PIC-16
- Linux environments
- Android: Bluetooth, NFC, Camera, QR Codes, & more

## Employment History

- **Sparkypants: 2015 – 2019**
  - Programmer and UI designer on multiple projects: Dropzone, The Elder Scrolls: Legends, prototypes, contracting work with Unreal Engine
  - Experience working remotely starting in July 2017 (company based in Baltimore, MD; my current residence in Santa Cruz, CA)
  - Worked with various teams with daily “scrum” meetings; responsible for self-management and productivity
- **Independent Game Developer & Digital Media Experimenter: 2014 – Present**
  - Published Android Game: Kitten Rescue (more details under “Notable Projects” below)
  - Android App for tracking mileage and maintenance on my 1990 Honda Civic (RIP)
  - “Demake” of mobile game (Flappy Bird) to run on 8-bit Nintendo Game Boy hardware
  - Multiple web prototype projects including: procedural art generation, musical “instrument” inspired by rippling water effects, asynchronous multiplayer version of Conway's Game of Life (Node.js)
- **SunStone Information Defense: Fulltime(2012 – 2015), Contracting (2015 – Current)**
  - Key player in small team (4 to 7 people); always adapting, always learning new technologies
  - Implemented Interactive graphical database monitoring and querying tool (front and back end)
  - Developed various Android demos, including communication with microcontrollers and Pebble
  - Created web demos utilizing Java Web Server technologies (JSP, JSF, Model-View Controller practices) and MySQL for back end, along with HTML/CSS and Javascript for front end

## Education

- **University of California, Santa Cruz: Class of 2012**
  - B.S. Computer Science: Game Design – Highest honors in the major
  - GPA: 3.74, cum laude

## Notable Projects (more projects and prototypes at: <https://alan-haug.github.io>)

- **The Elder Scrolls: Legends: 2017 – 2019**
  - Worked with Unity Game Engine (C#): scripting, programming, and UI layout
  - Rebuild and improved upon many existing features for our re-release on a tight schedule with a small team
  - Designed and implemented systems for: new player onboarding, single player campaign (multiple difficulties with replayable branching stories), deck collection and editor, tooltips, and various content editors
- **Dropzone: 2015 – 2019**
  - Started as UI programmer, developed into various gameplay and engine programming roles and contributed to some backend work as well.
  - Implemented numerous features with Coherent UI Framework (HTML/CSS/JS) and our custom

- engine (C++)
- Led work with one of our designers on the build pipeline for collecting stats on in-game equipment for display in various menus (C++, Python)
- Spent some time working with our backend team on account transfers and in-game purchasing (Node.js, MySQL, Steam API)
- Heavily modified our custom engine code to work on various prototype iterations
- Much of the project was spent with rapid daily iterations to improve the product as best we could in the quickest way possible
- **Kitten Rescue: 2014 -2015** (Google Play: <https://goo.gl/EhmZRI> )
  - Solo developer responsible for all programming, design, art, fonts, and sound effects
  - 2D mobile game made with Unity
  - Developed plugins for sound, vibration, in-app purchases, and full screen functionality; utilized packages for integration with Twitter and Facebook
- **Forest Quest: 2013 - 2014**
  - Served on 3 person team as lead designer and programmer, as well as project coordinator
  - 2D platformer made with Unity
  - Created endless platforming system, scoring system, player movements and power-ups, and more
  - Commissioned project for a UC Santa Cruz psychology department experiment, which assessed the impact of sexism in video games, specifically regarding the “Damsel in Distress” trope
- **Hello World: 2012** ([www.helloworldgame.com](http://www.helloworldgame.com))
  - Senior project on a team of 8 programmers, 2 artists, and 1 musician
  - 2D platformer with space flight and procedurally generated planets written in C++ and SFML for Windows computers
  - Worked on many design and programming aspects, such as: physics, difficulty system, animation, procedural planet, and dynamic maze generation