

# Anton Heestand

## iOS Developer

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## Knowledge

### Programming

- Swift
- Metal
- GLSL
- Python
- JavaScript
- TouchDesigner

### Integration

- SwiftUI
- AVKit
- ARKit
- RealityKit
- SceneKit
- Combine

## Development

### Frameworks

- **RenderKit** - Realtime Render Engine Protocol powered by Metal.
- **PixelKit** - Live graphics framework in Swift powered by RenderKit.
- **VertexKit** - Live particle system framework powered by PixelKit.
- **VoxelKit** - Volumetric realtime graphics powered by RenderKit.
- **LiveValues** - Live value types.

### Apps

- **Pixel Nodes** - Live Graphics Node Editor.
- **Pixels Layer Cam** - Layered camera effects.
- **The Pixel Cam** - Live preset camera filters.
- **VJLive** - Dual deck video playback.
- **CleanOSC** - Controls for communication via OSC.
- **Pixel Script** - Script live graphics.

## Education

IT Media at **John Bauer** ( 2008 - 2011 )

Digital Media at **Hyper Island** ( 2011 - 2013 )

# Experience

## Moodelizer

iOS Developer in **Stockholm** from **Apr 2018**

- **AR Face Masks**
  - With ARKit we mapped masked 2D and 3D face masks to a face. Mapped jaw movement to dynamic music with an internal sound engine.
- **AR Objects**
  - With ARKit we placed a an object in the room and added spacial interactions.
- **Geolocation**
  - With MapKit we connected the users position with dynamic music.
- **Multi Device Sync**
  - With Bluetooth we connected multiple devices to play music in sync.

## Obscura Digital

Interactive Engineer in **San Francisco** from **Sep 2014** to **Sep 2016**

- **Shantou Arena**, Shantou, China.
  - Permanent projection mapping installation with TouchDesigner.
- **R&D with industrial robot**, San Francisco, USA.
  - Projection mapping, camera trail motion & 360 3D photo capture.
- **Fiat Lux**, The Vatican.
  - Projection mapping on St. Peter's Basilica to celebrate The Popes gathering for The Feast of the Immaculate Conception.
- **Bolden Movie Set**, North Carolina.
  - Visual effects for movie production, retopologizing point clouds to meshes, calibrating projectors and projection mapping.
- **Dallas Cowboys**, Texas, USA.
  - Responsible for video cue system and pixel mapping onto the Jumbotron, ribbon screens and custom rotating screen for home games at AT&T Stadium.
- **Dome mapping**, San Francisco, USA.
  - Projection mapping on the dome in the Westfield Mall with TouchDesigner.

## Madrone Studios

Creative Developer in **The Bay Area** from **Aug 2013** to **Jun 2014**

- **Twitter**, Chicago, New York, San Francisco, USA.
  - Pre IPO client events. Projection mapping of company profiles and tweets.
- **Facebook**, San Francisco, USA.
  - F8 2014 Developer conference. Custom 3D projection mapping on a 30m long polygon structure. Showing live check-ins of participants and data visualisations.
- **Instagram** - Hong Kong.
  - 12-screen wall at the modern and contemporary art show Art Basel. Coded a dynamic puzzel visualisation showing live Instagrams at the event.

## NuFormer

Internship in **The Netherlands** from **Nov 2012** to **Jun 2013**

- **Dolfinarium**, Harderwijk, Holland.
  - Developed a fish swarm system with Xpresso and Python in Cinema 4D for a projection mapping show.
- **Interactive Window**, Zierikzee, Holland.
  - R&D motion tracking system with kinect. Interactive shopping experiences.