

Drew Harmon Pollock

Designer / Engineer
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Experience

Hewlett Packard Enterprise Labs, Research Engineer *Winter 2015- Fall 2016*

- Explored novel applications of video game mechanics and technology to enterprise experience
- Developed new system visualization tool using BabylonJS frontend and NodeJS backend
- Programmed futuristic user interfaces for marketing and technical applications. Merged classical HTML interfaces with virtual environments using Unity 3D
- Pitched demos and proof of concepts to internal business units

Northwestern University, Research Assistant *Fall 2013 - Winter 2015*

- Designed a tangible programming interface for a new exhibit at the Computer History Museum by combining custom RFID technology and a multitouch table.
- Evaluated educational impact of table-top games via surveys and user testing sessions
- Programmed an educational Dart app for a multitouch table-top game at the Shedd Aquarium

Independent Contractor, Designer *Winter 2012 - Fall 2013*

- Designed and assembled custom test fixture for electromechanical product
- Drafted RFID hardware prototypes for augmenting physical game lounge interactions

Stupid Fun Club, Designer/Prototyper *Summer 2010 - Winter 2012*

- Brainstormed and conceptualized hundreds of toy products
- Explored a variety of toy to toy play styles for connective and responsive systems
- Implemented a low cost robotic platform capable of obstacle avoidance and navigation
- Developed organic-like mechanical locomotion system for alien robotic toys
- Engineered optics for Ant Farm Revolution prototype, currently available online and in stores

Projects

Fishing with Friends (Northwestern graduate student project) *Fall 2013 - Spring 2015*

- Designed and implemented an educational multiplayer video game about sustainable fishing
- Debuted at Chicago's Shedd Aquarium as a temporary exhibit and used for in-situ user testing
- Ported Fishing with Friends to an iOS game, made available on Apple's App Store for iPads.

YouMedia Project Team (CMU graduate student project) *Winter, Spring 2009*

- Designed a physical space to complement a methodology and curriculum for teen activities at the Chicago Public Library (completed Summer 2009)
- Handled logistical and technical design issues during implementation and construction

Education

Northwestern University, currently enrolled - part time, nights/weekends

- PhD Student, HCI in Computer Science (second year), Advisor: Dr. Michael Horn

Carnegie Mellon University, Graduated *Summer 2010*

- Masters in Entertainment Technology from the Entertainment Technology Center

California Institute of Technology, Graduated *Summer 2008*

- B.S. Mechanical Engineering (personal focus in robotics)

Skills

Languages: C#, Python, Google Dart, Javascript, Java, C/C++, HTML/CSS, Arduino/Processing

Design Software: Unity3D, Adobe CS Suite, 3D Studio Max

Other Software/Packages: NodeJS, Django, Mathematica, Matlab, Microsoft Office

CAD/CAM: Solidworks (*advanced*), TurboCAD/CAM, Autodesk Inventor

Machining Experience: Proficient with lathe and mills. Basic experience with CNC, Tormach PCNC1100, primarily for rapid prototyping. Material experience includes aluminum, steel and wood

Electronics Experience: Familiar with developing prototype electrical/embedded systems with Arduino, RPi, and Beaglebone boards. Comfortable reading product datasheets, soldering, general wiring and basic analog circuits.