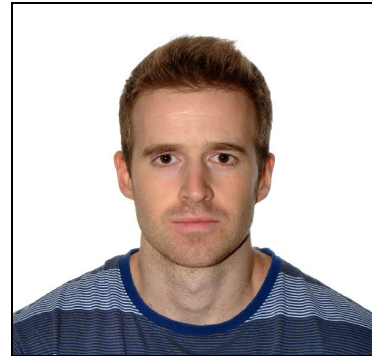


Andrew Varga - Curriculum Vitae

Personal Information

Andrew Varga
Born in: 1987.08.12., Budapest
Hungarian

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Summary

Software developer focusing on interactive web and mobile platforms. Primarily using Object Oriented JavaScript, TypeScript, WebGL.

My goal is to architect, design and build maintainable, scalable cross-platform user experiences. Favorite area is creating online tools, Single Page Applications with great UI.

Technical Skills

Languages:

- JavaScript (8 years)
- TypeScript (4 years)
- HTML, CSS (7 years)
- PHP (6 years), CSS (7 years)
- Node.js (4 years)
- MySQL (6 years)
- WebGL (5 years)
- C#, C++ (3 years)

Technologies/frameworks:

React, three.js, Sencha Touch, Ext.js, require.js, Modernizr, PhoneGap, Electron, Grails, Flex.

Experience with:

Java, Python, Unity3D, Unreal 4.

Interest in:

Machine Learning (Coursera course), AI (udacity course).

Work Experience

- **2006 – 2013: freelancer** for various agencies including: Multi M Studio, Spring Interactive, Sixth Floor Developers (6fd) , Firstborn Multimedia
 - building microsites, web campaigns, games primarily using Flash.
- **Summer of 2007: developer intern at unit9 in London**
Developed ad campaign for an AT&T microsite in Flash.
- **June 2009 – September 2009: developer intern at Firstborn Multimedia in NYC**
Worked with other developers in teams on online web production sites for clients like Aflac, IBM using Flash.
- **July 2012 – 2015: software developer at Powered Now**
Worked in a team of 3 developers building a cross-platform e-commerce application using web technologies.
Tasks:
 - refining specifications, planning architecture of the client and server code
 - integration with PhoneGap
 - integration of services like Google Drive, Dropbox
 - heavy MVC JavaScript usage on client
 - PHP on the server with the Kohana framework
- **2015 – present: lead developer at Space Designer 3D**
Developed the editor application, using TypeScript, 3d math, computer graphics.
Tasks:
 - making architectural decisions
 - recruiting and managing a team of 5 developers
 - managing clients, distributing tasks to developers
 - planning technological road maps

Work Projects

Portfolio (2011) – html site, listing some of my older flash works

<http://andrewvarga.com>

Image editor (2013) – Lagoa Limited (acquired by Autodesk)

<http://andrewvarga.com/projects/imageEditor/>

2D image editor (you can drag 'n drop images on top of it). Created a tiling system to handle processing of arbitrarily large images. The app was built to be used with Lagoa's online web

based 3D authoring application.

Written in JavaScript with require.js from scratch.

Later rewritten in TypeScript:

<https://imageplayground.net/>

Powered Now (2012-2014) - Sencha Touch business app

<https://www.powerednow.com/>

I was involved full time in developing a business app initially deployed to the iPad. It is used by field based services to help their daily work, including customer management, invoicing, recording of payments.

Tasks included: heavy usage of JavaScript on client side using Sencha Touch. The app code is structured to follow MVC guidelines.

On server: creating API in PHP using the Kohana framework.

Created most of the code responsible for providing a sync mechanism that synchronizes between multiple devices in real time.

The app was written with mobile first in mind: works offline (uses WebSQL, synchronizes with the server API whenever it can).

Using responsive techniques (CSS media queries), to support mobile phone screens, tablets and desktop screens.

Small hobby projects

- gltf Editor (web application written in React)
<http://gltfeditor.com>
- Birdy (website)
<http://andrewvarga.com/projects/birdy/20170120/>
- NURBS editor for 3d printing of light bulbs.
Built in JavaScript, three.js library, jquery.
<http://andrewvarga.com/works/crl/shapeEditor/>
- Triangle visualization: using my own WebGL library written in JavaScript.
<http://andrewvarga.com/projects/triangles/>
- Metaballs demo: using Javascript, GLSL.
<http://andrewvarga.com/projects/glwrap/examples/metaballs/>

Space Designer (2015-)

CAD application to design interior and exterior projects.

My role includes managing a team of developers, designing the architecture of the application, plan roadmap decision, implement new features.

<https://www.spacedesigner3d.com/>

Technologies used: TypeScript, WebGL, Riot, React, PHP, HTML, CSS, stylus, node.js, C++, Electron, nvidia iRay.

Education

- Budapest University of Technology and Economics
Computer Engineering Bsc., 2006-2011

University Studies

Main areas:

- Natural science: Calculus, Physics, Probability Calculus, Electronics.
- Computer science: Digital Design, Software Technology, Coding Techniques, Computer Architectures, Measurement/Software Lab, Artificial Intelligence, Theory of Algorithms, Databases, Control Engineering, Computer Graphics, System Modeling, Operating Systems.

University Projects (2011):

Pre-thesis: A Papervision3D demo to benchmark performance of software based 3D on the web. This small experiment uses own physics and can be found at:

<http://andrewvarga.com/bme/onlab/>

Bsc Thesis (2011):

Web based 3D applications: I discovered current options for deploying 3D on the web (at the time). The abstract in English can be found here on the 4th page:

http://andrewvarga.com/bme/szakdolgozat_szakdolgozat_bsc_ELQL4D.pdf

- Built an experiment that can be seen with Anaglyph 3D glasses:
<http://andrewvarga.com/bme/szakdolgozat/spacedemo/>
- A simple motion detection/tracking experiment:
<http://andrewvarga.com/bme/szakdolgozat/webcam/>

Spoken languages

- English
- intermediate German

Interests

basketball, soccer, cycling, traveling, movies