Oleksandr Popov

Front-End / WebGL Developer

I am a skilled web developer with more than 15 years of progressive experience, proficient in various web design tools and programming languages.
I have experience with OpenGL ES and WebGL - creating apps from scratch without ready-to-use engines, performance optimizations of apps using these APIs for web and Android platforms.
I am a successful team leader and skilful software engineer. My communication skills allow me to easily interact with customers from different countries.

GitHub - https://github.com/keaukraine/
Blogs - https://medium.com/@keaukraine, http://androidworks-kea.blogspot.com/
Articles on Habrahabr - https://habrahabr.ru/users/diamond3/topics/
Articles on DOU - https://dou.ua/users/oleksandr-popov-1/articles/

CONTACTS

Email - keaukraine@gmail.com
Phone/Viber/Telegram - +380671368327
Skype - popov.oleksandr

TECHNICAL SKILLS

GENERAL	Programming Languages	HTML, CSS, JavaScript, TypeScript, GLSL, CoffeScript, XML, Sass. Additionally bash, C# and Java.
	Web Standards	HTML5, CSS3.
PLATFORMS, TECHNOLOGIES AND PROGRAMMING SKILLS	Technologies	JavaScript, HTML/CSS, HTML5, SVG, AJAX, Responsive Web Design, Cross-Browser / Cross-Platform Development. WebGL 1/2, OpenGL ES 2.0/3.0+.

	Front-end techniques and tools	CSS Grids, CSS Frameworks/Resets, Bootstrap, Foundation, CSS Preprocessors (Sass, Less), microdata (Schema.org). CSS animations, CSS sprites.
	JavaScript frameworks	jQuery, jQuery UI, Kendo UI, Underscore, require.js, Jasmine, React.js, Angular, Three.js. Additionally, knowledge of node.js+express.
	Debugging tools	Chrome Developer Tools, Firebug, IE Web developer toolbar. Karma test runner. Additionally, Android emulator / iOS simulator, BrowserStack.
TOOLS	Installation, deployment and other tools	MS Visual Studio Code, Sublime Text 2, Adobe Photoshop, GIMP, MS Visual Studio, PHPStorm, WebStorm, Webpack, Grunt.
	Source Control tools	TFS, CVS, SVN, Git, Gitlab, GitHub, git-repo.

EXPERIENCE

Most recent articles on WebGL/OpenGL ES

All of these articles describe ways of implementing certain rendering techniques.
Voxel Airplanes 3D - describing heavy vertex data optimization for specific use-case of small voxel geometries. Also participated in The Chronos Group live WebGL Meetup stream with this topic - https://youtu.be/2ME1aTD5-0k?t=866
Implementing soft particles in WebGL and OpenGL ES - detailed explanation of how to create soft particles for smoke/clouds effects with live example and source code.
Optimization of OpenGL ES vertex data - article explaining how to choose an optimal OpenGL ES data type to store certain vertex information.
Creating mountains landscape in OpenGL ES - overview of techniques and optimizations used to efficiently create large 3D mountainous environments. Includes source code.

Android apps published on Google Play

I'm an author of Android apps which are 3D live wallpapers. They are published on Google Play here - https://play.google.com/store/apps/dev?id=6428268730053234821.

09/2017 - current   **Front-end/WebGL developer, subcontractor for HERE**

Visualization of geospatial data. Implementing visualization of various geospatial data (JSON/GeoJSON or Protobuf-encoded). Performance optimizations (CPU and RAM usage, web workers). GPU optimizations (reducing draw calls count, memory usage).

- TypeScript, WebGL (custom framework based on Three.js).
- Protobuf.js
- Webpack.
- Sass.
- Jasmine, Istanbul, Playwright.
- Integration with Angular app.

07/2017   **Author**

bootstrap-fs-modal - a library to improve UX of Bootstrap modals on mobile phones.
Designed and implemented UX improvement for stock Bootstrap 3 and 4 modals to achieve more native look and feel on mobile phones.

https://github.com/keaukraine/bootstrap-fs-modal

https://github.com/keaukraine/bootstrap4-fs-modal

https://www.npmjs.com/package/bootstrap-fs-modal

https://www.npmjs.com/package/bootstrap4-fs-modal

- Open-source project.
- jQuery, Twitter Bootstrap 3 and 4.
- Less.
- Grunt to automate build.

05/2017 – current   **Author**

Cryptofees - a simple service to compare cryptocurrencies transaction fees.

Created from scratch, improving, supporting and maintaining this project.

http://cryptofees.net

- Bootstrap, React.js, Lodash.
- Using external APIs to retrieve JSON data.
- Hosting and publishing using surge.sh.

11/2016 – 07/2017   **Front-End Developer, Onlinico**

Web site created to establish communication between physicians and HIV-positive people.

- Twitter Bootstrap responsive layout.

- HTML5, CSS3, SVG images, web fonts.
- CSS generated using the Sass compiler.
- jQuery, Mustache.js, AmCharts JS libraries.

04/2016 – 05/2016   Front-End Developer, Onlinico

Real estate catalogue website.
- Twitter Bootstrap responsive layout.
- HTML5, CSS3, SVG images, web fonts.
- CSS generated using the Sass compiler.
- jQuery, Mustache.js, Mapbox JS libraries.
- Grunt to build HTML and parse JSON data from CSV.

2013 – 10/2015   Front-End Developer, Onlinico

"Knigoskop" is a non-profit project dedicated to literature. It has data about the vast number of books and authors and provides recommendations based on the user's own library.
- HTML5 + CSS3 responsive design.
- Graceful degradation of modern CSS features, supporting IE down to version 9.

02/2016 – 04/2016   Front-End Developer, Onlinico

"Beacome" - a website and mobile apps for maintaining iBeacons. https://beaco.me/
- Based on Twitter Bootstrap.
- Not targeting mobile devices - this is a desktop-only web site.
- HTML5, CSS3, SVG images, web fonts.
- CSS generated using Sass compiler.

2013 – 10/2015   Project Manager

Managing team working on mobile application for tourists and hikers in Ireland. Back-end was provided by the customer, and 2 mobile applications – separate for iOS and Android were to be developed by ELEKS.
- Handling communication with a customer (customer is also an intermediary; collecting requirements took quite a long time).
- Assigning final tasks for developers in MS TFS.
- Handling internal team communication and conflicts.
- Maintaining project profitability given limited budget and running out of schedule.

2/2012 – 12/2012   Project Manager

Managing team working on mobile enterprise application for handling school dismissal queues. It is a legacy application of a bad quality initially developed by a low-cost freelance team. Responsibilities:

- Handling communication with sometimes problematic customer
- Optimizing and organizing chaotic requirements from a customer. Assigning tasks for developers in MS TFS.
- Handling internal team communication.
- Maintaining project profitability given a very limited budget.

9/2011 – 12/2011   **Web Developer, subcontractor for [Xyleme](#)**

Development of WebEngine, a web-based application for creating insurance questionnaire forms.

- Implemented web design into the application using MS Visual Studio 2010 and Adobe Photoshop.
- Implemented mobile-optimized style sheets and markup with the corresponding design using HTML5/CSS3.
- Applied Firebug, Google Chrome, and Internet Explorer Development Tools to debug and monitor JavaScript, CSS3, and HTML5.
- Optimized WebEngine application for Android platform using responsive markup, CSS media queries and JavaScript.

4/2011 – present   **Developer / Project Manager**

The translation agency needed an application that would manage and facilitate the translation process. The delivered application contained numerous dictionaries that facilitated the process of technical documentation translation. The application also allowed saving the translated documents in various formats. Currently, the team supports the developed system.

- Designed a set of proprietary applications for maintaining automated translations.
- Supported existing applications by enhancing earlier versions, eliminating bugs, and adding complementary functions.
- Performed code revision to improve its consistency and readability.
- Planned and managed application development throughout all phases of project lifecycle.
- Maintained communication with the customer, prepared weekly reports, estimated and assigned new tasks.

1/2011 – 12/2011   **Developer / Project Manager**

The objective of the project was to develop an application for a pharmaceutical industry that would allow data synchronizing between a project-tracking system and MS SharePoint 2010.

- Designed the application using MS Visual Studio 2010 and Microsoft SharePoint platforms.
- Managed the application development process to ensure that every milestone was done on schedule.
- Responsible for identifying and analyzing business and system requirements.

10/2010 – 12/2010   **Web Application Developer**

At this project I was tasked to design ServiceTrack, a web-based application for tracking, analyzing, and supporting life reinsurance policies.

- Developed the application and monitored its quality throughout the entire development lifecycle.
- Participated in website design with the help of XHTML, JavaScript, and CSS.
- Tested the website design compatibility with the most popular browsers.

10/2010 – 12/2011   **Developer / Project Manager**

Development of an application for migrating restructured data between MS SharePoint 2007 and MS SharePoint 2010 for a pharmaceutical company.

- Designed and developed the application to shift data between different versions of MS SharePoint.
- Successfully integrated existing code with the .NET software framework.
- Applied TFS for source control and reporting new tasks, requirements, or bugs during the software development process.
- Motivated and coordinated team work according to the Scrum methodology.

7/2010 – 9/2010   **Developer**

The project aim was to develop an iOS application for creating custom postcards, printing them, and sending by regular post.

- Coded the application using Objective-C in the XCode IDE.
- Applied HTML to create text for electronic postcards.
- Tested the application employing iPhone Emulator and actual iPhones.
- Performed software versioning and revision control by means of Apache Subversion.

7/2009 – 6/2010   **SharePoint Developer**

Lviv City Council needed an MS SharePoint 2007 application to automate a wide range of governmental processes. These processes included managing cross department processes and procedures for the entire local government, the interaction and communications with and among Lviv Council employees, and communications with other local, state and national governmental agencies. The project was challenging because of the large scope of work and numerous requirements.

- Developed the application using MS Visual Studio 2008 and MS SharePoint to allow department heads simultaneous access to calendars for assigning tasks to their subordinates.

5/2008 – 4/2009   **Junior Web Developer**

ELEKS developed and implemented a multiplayer online football game where gamers sign up and build their football careers as football players, managers, and journalists. The application featured intuitive GUI, scalability, extensive help section, and ability to view the real-time statistical data.

- Developed the portal using Microsoft Client Software Factory.
- Extensively applied DevExpress components for the ASP.NET framework.
- Enforced database storage on MS SQL Server 2008.

"Nica" LLC, Svitlovodsk, Ukraine.

2006 – 2009   **Junior Delphi Developer**

- Development of applications for local businesses. Applications are used to automate inventory control and accounting. Implemented in Deplhi 6+7 in conjunction with Interbase/Firebird SQL DB.

EDUCATION

- MS in Computer Science, Kremenchug Private University "KUEITU", 2011
- BS in Computer Science, Kremenchug Private University "KUEITU", 2009

LANGUAGES

- English – intermediate
- Russian – native
- Ukrainian – native