

ALEKSANDR BARKAN

POLYGLOT SPECIALIZING IN WEB / 3D / WEARABLES / OPTIMIZATION

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341 10th Street 7E, Brooklyn NY



Above: implementations of modern rendering techniques & algorithms from research published at GDC and SIGGRAPH conferences.

EXPERIENCE

Android & Fullstack Engineer

Augmate, New York (04/2014 - Present)

VC-backed startup: Wearables and IoT Management Platform for Enterprise.

- Built apps for Google Glass, Vuzix and Epson smart eyewear. Indoor positioning using BLE beacons. Scalable API and front-end web dev. Evangelized modern Java, TDD, and CD best-practices.
- Used **Java, C++, Android, Dagger, Dropwizard, RxJava, AngularJS, Docker, Git, IPython, Robolectric, Mockito, CircleCI**, and **AWS (EC2, Kinesis, RDS, OpsWorks)**.

Founder & Fullstack Engineer

Bugvote, New York (04/2012 - 04/2014)

Bootstrapped startup: Reddit-style bug tracking for mobile app developers.

- Responsive web design and development using **HTML5/JS/SASS+CSS3, Mustache, Nginx, MariaDB, Sphinx Search, Redis**. Integrated Google Play, Windows App Store, and Apple App Store APIs.
- Continuous Deployment and BDD using **Git, Behat, Docker**, and **PhantomJS** on **AWS**.

Real-time Graphics Programmer

NBCUniversal, New York (07/2011 - 03/2012)

The ArtWorks real-time graphics department servicing a fast-paced 24/7 news environment.

- Twitter + Facebook ingest engine and queuing UI to power MSNBC's live TV productions using **C#, MSSQL, TSQL, WPF**, MassRelevance API, integrating with ORAD TV.
- Playout controller for news anchors in the field using **DirectShow/IIS/C#**, an iPad, and a satellite truck.

Software & Game Developer, R&D

Vectorform, New York (07/2008 - 04/2011)

Bespoke Digital Agency specializing in cutting-edge solutions for high-end brands.

- Optimized high-performance systems while delivering creative pixel-perfect UIs.
- Built frameworks, SOAs (**REST/WSDL**), POS/Kiosk devices, and NUI experiences on a range of platforms from Web to the Xbox Kinect for BMW, Intel, Disney, Lockheed Martin, Microsoft, Chrysler, and New York Times.
- Used **C#, C++, DirectX, PHP, CSS3/JS, Canvas, Surface, Unity 3D, WCF, WPF, Xbox Kinect**.

Fullstack Engineer

Global Gaming League, Distributed Team (2003 - 2004)

VC-backed startup: Online competitive gaming platform. Bringing eSports to the mainstream.

- Built the admin panel, ladder logic and tournament system. Used **LAMP** stack + **CSS/JS**.

EDUCATION

Brooklyn College, New York

Robotics Programmer at Autonomous AI Research Lab (2006-2008)

- Locomotion, rigid-body dynamics simulation, machine vision, robot control software. Used **C++, ODE/Physx, OpenGL**, and **Perl**.
- Competed in Robocup for 2 years; we made it to the International Finals in 2007.

Bachelor of Science in Computer Information Science (2007)

- Published Entry-Level Soccer for Undergraduates – 3D visualization and simulation platform for swarm AI. Presented at **AAAI Spring Symposium, Stanford (2007)**