**PORTFOLIO** dkharlamov.com LINKEDIN linkedin.com/in/khar/ GITHUB

github.com/dkharlamov

# DANIEL KHARLAMOV SOFTWARE ENGINEER

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# **OBJECTIVE**

Software Engineer with a strong background of developing interactive games/software and web applications. Strong experience with Object-Oriented and Functional programming concepts spanning over 5 years. Deep passion for learning, persistent problem solver, and am deeply curious. Looking to gain experience from strong teams and to contribute to teams of all sizes. Looking for a start to my game development career.

## LANGUAGES:

Java - 5 Years C# - 4 Years C++ - 3 Years Javascript - 2 Year Python - 1 Year PHP - 1 Year Ruby - 1 Year

PROFESSIONAL INTERESTS: Simulations 3D Modeling Visual Effects Virtual Reality **Design Patterns New Technologies Computer Graphics** Realtime Rendering Controller Hardware **Building Frameworks** Game Development Human-Computer-Interaction 3D Math

## PROFESSIONAL EXPERIENCE

## SOFTWARE ENGINEER

Robin Care Inc., Palo Alto, CA

Developed critical client-facing applications, internal tools, and APIs using modern Javascript ES6, React.js, and NodeJS.

- Deployed web apps using Google Cloud Platform
- Implemented modern user interfaces using the Material UI framework and CSS
- Wrote and maintained custom Wordpress scripts in PHP.
- Tracked features and bugs on Jira and closely communicated with all members of the product, design, and development team.

Javascript (ES6), React.JS, React (Native), Redux, NodeJS, Express, Lodash, Google Cloud Platform, Yarn, Material-UI, CSS, PHP, VSCode, Wordpress, Git, AppEngine, Firestore, Datastore, Cloud Storage, MySQL

# UNDERGRADUATE RESEARCHER

CSU Monterey Bay, Seaside, CA

Researched many HCI and Computer Graphics topics. Developed 3D pointing solutions, virtual reality inside-out tracking, and controller hardware.

- · Collaborated with fellow researchers to develop sensor-fusion based inside-out tracking of walking.
- · Developed Smartwatch-based 3D pointing software for mobile virtual reality using Android SDK, AndroidJNI, and the Unity Engine.
- Developed simulations using DirectX 11 and Compute Shaders to test scalable methods for optimizing volumetric airflow analysis.
- Designed and tested circuitry for the non-invasive sensing of muscle movements to be used in low cost prosthetics.
- Gained leadership experience by assisting in the teaching of DirectX 11 and 3D Mathematics
- Built frameworks in the Unity Engine using Oculus SDK for students to learn Virtual Reality development

C#, C++, Java, Unity3D, Direct3D, DirectX11, Compute Shaders, Sensor Fusion, Shaders, HLSL, Visual Studios, GearVR, Python, Arduino, Oculus SDK, Android SDK, AndroidJNI, Bluetooth LE, Android Studio, Android Wear, Blender, CG, Git

## SOFTWARE DEVELOPER

Yottamark Inc., Redwood City, CA

June 2014 - August 2014

May 2018 - May 2019

May 2016 - December 2017

Developed models and frameworks using Appium and Java to create and automate tests for mobile applications.

- · Worked on web-based tests using Ruby and Rspec.
- · Collaborated with an Agile team and utilized industry tools like Jenkins, Jira, TestNg, and JUnit to build test automation.

Java, Ruby, Appium, Rspec, Jenkins, JUnit, Git

## EDUCATION

# SKILLS:

Teamwork Motivated Fast Learner Communication Attention to Details Problem Solver Organization Leadership

## Tools:

**NodeIS VSCode** React.is Express.js Material-ui GCP (AppEngine, Firestore, Datastore, and Cloud Storage) **Unreal Engine Android SDK Unity Engine** Oculus SDK Photoshop DirectX 11 Blender GearVR mySQL MOI3D HLSL

Git

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## BACHELOR OF SCIENCE, COMPUTER SCIENCE DISTINCTION IN MAJOR

California State University Monterey Bay

Relevant Coursework:

Advanced Game Programming, Game Engine Programming, Graphics Programming, Internet Programming, Computer Networks, Network Security, Computer Architecture, Mathematics for Computing, Calculus, Discrete Mathematics, Undergraduate Research II, Multimedia Design and Programming

# Honors:

Distinction in Major summa cum laude

# PROJECTS AND INTERESTS

### **PUBLICATIONS**

TickTockRay: Smartwatch-Based 3D Pointing for Smartphone-Based Virtual Reality (VRST '16)

Kharlamov, D., Woodard, B., Tahai, L., & Pietroszek, K. (2016, November). TickTockRay: smartwatch-based 3D pointing for smartphone-based virtual reality. In Proceedings of the 22nd ACM Conference on Virtual Reality Software and Technology (pp. 363-364). ACM.

TickTockRay: Smartwatch Raycasting for Mobile HMDs (SUI '16)

Pietroszek, K., & Kharlamov, D. (2016, October). TickTockRay: Smartwatch Raycasting for Mobile HMDs. In Proceedings of the 2016 Symposium on Spatial User Interaction (pp. 181-181). ACM.

## **PROIECTS**

#### Aircvcle

Worked with a team to produce an Unity and Gear VR exer-game where the goal is to pedal a plane through a canyon. I was in charge of developing an IMU Bluetooth LE circuit that detected the motion for pedaling which directly controlled the acceleration of the plane.

Tech Used: C#, C, Java, Unity Engine, Arduino, Android SDK, Android Studio, GearVR, Bluetooth LE

## **VRDrive**

VR driving framework implemented for Unity so that people could develop first person driving experiences quickly without having to implement the complex mathematics associated with virtual reality inputs.

Tech Used: C#, Unity Engine, Oculus SDK, Oculus Touch, Oculus Rift

## GameJam VR Framework

Worked with a colleague to write a framework to help teach students about developing virtual reality games in the Unity Engine. This framework aimed and succeeded at making it easy for students to create a virtual reality game in a week. Tech Used: C#, Unity Engine, Oculus SDK, Oculus Touch, Oculus Rift

## HOBBIES:

Design Cycling 3D Modeling Craftsmanship Game Development **Electrical Engineering Music Production** Synthesizers Exploring Cooking Gaming Guitar Hiking