5805 CHARLOTTE DRIVE, APT. 430 SAN JOSE, CA 95123 (650) 799-9203 DANIELKHARLAMOV17@GMAIL.COM

<u>Portfolio</u> DKHARLAMOV.COM LINKEDIN LINKEDIN.COM/IN/KHAR/ GITHUR

GITHUB.COM / DKHARLAMOV

### SKILLS:

**TEAMWORK MOTIVATED** FAST LEARNER COMMUNICATION **ATTENTION TO DETAILS** PROBLEM SOLVER ORGANIZATION **LEADERSHIP** 

# PROFESSIONAL INTERESTS:

VIRTUAL REALITY **DESIGN PATTERNS NEW TECHNOLOGIES COMPUTER GRAPHICS CONTROLLER HARDWARE BUILDING FRAMEWORKS HUMAN-COMPUTER-**INTERACTION

# DANIEL KHARLAMOV

# SOFTWARE ENGINEER

# PROFESSIONAL EXPERIENCE

#### SOFTWARE ENGINEER

MAY 2018 - PRESENT

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 PRODUCTS
- 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.

#### TEACHING ASSISTANT

IUNE 2017 - DECEMBER 2017

CSU MONTEREY BAY, SEASIDE, CA

DEVELOPED VIRTUAL REALITY FRAMEWORKS FOR STUDENTS AND ASSISTED STUDENTS IN LEARNING COMPUTER GRAPHICS, GRAPHICS PROGRAMMING, AND SOFTWARE ENGINEERING.

- 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

#### UNDERGRADUATE RESEARCHER

May 2016 - August 2017

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.

## SOFTWARE DEVELOPER IN TEST

JUNE 2014 - AUGUST 2014

YOTTAMARK INC., REDWOOD CITY, CA

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.

#### LANGUAGES:

**IAVA** - 5 YEARS C# - 4 YEARS C++ - 3 YEARS **JAVASCRIPT** - 2 YEAR PYTHON - 1 YEAR PHP - 1 YEAR RUBY - 1 YEAR

Tools:

NodelS **VSCODE** REACT.IS **EXPRESS.JS** MATERIAL-UI GCP (APPENGINE, FIRESTORE, DATASTORE, and Cloud Storage) **UNREAL ENGINE** Android SDK **UNITY ENGINE** Oculus SDK **Рнотознор** DIRECTX 11 **BLENDER** GEARVR **MYSQL** MOI3D

HLSL GIT

### EDUCATION

# 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, 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.

#### **PROJECTS**

#### AIRCYCLE

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.

#### **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.

#### 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.

# **HOBBIES:**

DESIGN
CYCLING
3D MODELING
CRAFTSMANSHIP
GAME DEVELOPMENT
ELECTRICAL ENGINEERING
MUSIC PRODUCTION
SYNTHESIZERS
EXPLORING
COOKING
GAMING
GUITAR
HIKING

PORTFOLIO

DKHARLAMOV.COM

LINKEDIN

LINKEDIN.COM/IN/KHAR/

GITHUB

GITHUB.COM/DKHARLAMOV