# VILIUS VYSNIAUSKAS vilius-v.github.io

Permanent Address: 869 Launer Rd. Brea, CA 92821

**Objective** 

Obtain full-time position as an engineer in order to pursue my passion for learning and technology.

Education

## University of California, Los Angeles | Los Angeles, CA

June 2017

- Major: Computer Science and Engineering B.S.
- Current Cumulative GPA: 3.5
- UPE (CS honors club, top 1/3 of major) tutoring chair + host of undergrad review sessions

Experience

# Ozcan Research Group | UCLA

10/2016 - 06/2017

- Projects including QT applications, Matlab image registration, Android camera stack
- Lab goal: introduce new imaging and sensing architectures capable of compensating in the digital domain for the lack of complexity of optical components

#### **Relevant Coursework**

- *Circuit Analysis*: building protoboard circuits, Laplace transforms, power analysis
- Digital Design: MIPS single & multi-cycle, x86, caches, assembly, memory architecture
- Operating Systems: concurrency, virtual memory, security, scheduling, file systems
- Computer Networking: layered network architecture, routing protocols, TCP/IP emphasis
- Algorithm Design: divide & conquer, greedy, dynamic programming, NP-completeness

## UCLA Inventation 2016 | Los Angeles, CA

10/2016

- Integrated Uber API to create a medical Android app (1 day, ~1000 LOC)
- Use of Bluetooth and location services
- Laid out business plan to make profitable product proposal to investors (placed 3<sup>rd</sup>)

## USC vs. UCLA Open Hack 2015 | Los Angeles, CA

01/2015

- Created socially connected Android application called Scenic (1 day, ~2000 LOC)
- Integrated Google Maps API to leverage custom 3D interface
- Use of GitHub to manage code merging

#### **Projects**

- Simon Says: board game re-created with FPGA board & Verilog (digital design)
- Neural Spike Detector: absolute-value detector using CMOS and pass-transistor logic
  - 1. Layout optimized for regularity and minimal trace length using Cadence
- SimpleDB: implemented key features of a database system (buffer pool, catalog, files)
- WeensyOS: implemented crucial kernel and memory management modules of a simple OS
- OMusic: party playlist web app using Spotify API, Go, and Javascript (10 weeks, ~3000 LOC)
- ImagCalc: FPGA project enabling camera module to interpret 7-segment digits
  - 1. Numbers and operators are scanned; final expression is converted to bits and evaluated

## Work | Kinross South

03/2016 - 06/2017

• UCLA Library student worker at book cataloging center

### Skills

## **Programming Languages**

• C/C++, Java, OCaml, LISP, HTML + CSS

## General / Other

- Experience with Cadence (schematic & layout design, simulation & analysis), QT framework
- Software construction: UML diagrams/design, version control, project management
- Linux familiarity: CLI tools, GDB debugging, BASH