# Mauricio Gomez Aguinaga Software Engineer

www.bukue.com 323.682.8583 mauricio@bukue.com

# **Experience**

#### **Uber – Lead Software Engineer**

2018 - Present

I am currently working on integrating deck.gl into our development environment for autonomous vehicles in the Advanced Technologies Group. In the past I also lead the front end for Ad Tech Team, where I grew the team to 7 full-time employees and up to 10 contractors across 3 different geographies. We worked on projects like: City Guides, Marketing Budget Allocation, Uber Marketing Services and lots of infrastructure changes to modernize our stack.

#### Chan Zuckerberg Initiative – Senior Software Engineer

2017 - 2018

Automate our infrastructure maintenance, monitoring, creation and on demand scaling on AWS and Heroku. I have also driven tons of enhancements to facilitate data transmission and performance across different apps.

#### GoDaddy - Senior Software Engineer

2016 - 2017

I was part of the Online Store team. Completely refactored the backend using Ruby on Rails, contributed on the integration with foreign processors, shipping services and internationalization.

#### **Groupon – Senior Software Engineer**

2013 - 2016

Worked on the Point of Sale for the iPad for Groupon Merchants: Breadcrumb. I implemented the enterprise level reporting, migrated our administration portal into a single page app and implemented a native iPhone App for real time reporting.

## **Walt Disney Animation Studios - Technical Director**

2012 - 201

Developed and improved the assets pipeline and created tools to assist the studio in content creation for feature films like Frozen, Wreck it Ralph, among others. My main projects involved creating a system to monitor render farm utilization, a user interface for publishing assets and a particle based Snow Painting Tool.

## POSLavu - Software Engineer

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Re-wrote the front end for the web administration portal, implemented the Table Layout Setup module, the Printer Discovery algorithm and led the implementation for our first Quality Assurance Plan.

#### **Aspen Avionics - Software Engineer Intern**

Summer 2011

Implemented 3D terrain rendering, obstacles, traffic, obstacles, airport and runways display, altitude guidance and many aspects of the main user interface for the Synthetic Vision module for the EFD 1000 Glass Cockpit.

#### Advanced Graphics Labs, University of New Mexico - Research Assistant

2009 - 2011

Research and development of high-end Computer Graphics algorithms and applications. Including Interactive Rendering in a Dome, Route Maps Visualization using the Moiré Effect, Interactive Projective Texture Mapping to provide new textures to user bodies, Binocular Stereo Reconstruction and Haptic Rendering.

#### Personal Projects

#### **OBD Python**

An open source, transactional, object oriented python wrapper on top of serial communications over the OBD II port that allow you full access to all of your car computers (ECU).

# **Touch Shaders**

Geometry reconstruction using the horizontal disparity map from a binocular image. The scene then is rendered in a 3D screen and was able to be touched by a haptic device. My system includes shading framework that allows to paint touch textures on top of geometry so the haptic device reacts differently when it is in contact with different parts of the virtual objects.

#### Education

#### University of New Mexico

2009 - 2011

Masters in Computer Engineering with emphasis in Computer Graphics

Advisor: Pradeep Sen

# **Monterrey Institute of Technology**

2004 - 2008

Bachelor in Computer Science

# Skills

Programming Languages: Ruby, Python, JavaScript. Previous experience with C/C++ and Java.

Libraries, APIs & Languages: Rails, React, Django, QT, iPhone SDK, SQL.

Software: Git, Sublime, Xcode, Adobe Creative Suite, Terraform, Ansible, Maya.

**Languages:** English, Spanish and Basic Mandarin.

#### Certifications

- Object Oriented Modeling on Rational RT011.
- Sun Certified Java Programmer for Java (SCJP)
- IBM Certified Database Associate DB2 (000-730).
- Cisco Certified Network Associate.
- Maya Dynamics and Simulation.