**Benjamin Hopper**

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**Technical Summary**

***Specialization***

Cross-device communication between Android Applications and Web Applications

***Web Programming and Scripting***

Responsive web design, JS, Jquery, WebSocket, JQM(Jquery Mobile), Json, nodejs, JADE, AJAX, Python, PHP, SQL, HTML5, CSS, WebWorkers(browser multi-threading), EasyUi, Mustache, Pheasant, MVC style development / OO programming, Python embedding for C/C++

***Mobile Application Development***

JAVA with eclipse, Android SDK, Android Communication using web sockets(roderick.weberknecht)

Python Socket Server development

***General Linux and Windows Programming***

GNU C/C++, MS Visual C++(managed/unmanaged), C#, Visual Basic , OS Python Scripting

***Cross-platform Development***

Qt framework for C++ GUI/QSql/QTcp...

S***QL Database Programming and Reporting***

MySql, MySqlite, MS SQL Server, MS Access, MSDE, SAP, CrystalReport, (worked heavily with sql since 1994)

***HTML, JSON, CSS, hand-coded***

Eclipse, Sublime Text 2/3, Geany, Gedit

***Original Design & Image Editing***

Fireworks, GIMP

***Source Control***

GIT Hub

***Web-server installation & configuration***

Apache, NodeJs , Expess

***Administration / Development Environments***

LINUX(UBUNTU/CENTOS servers and VPS) light administration functions, WHM, CPANEL, SSH, FTP...

## **Professional Experience**

* 1. ***Software Engineer, 2014 – current (****sole-contributor / on going****)***
  2. *Arf Communication Stack, (Open Source Project)*

1. Designed three-layer cross-platform protocol riding on top of websockets.
   1. Designed and implemented communications server, Android(JAVA) interface and client-side(java script) interface.
   2. Created special middle-ware for controller routing purposes(eases protocol parsing).
   3. Planning and designing a C++ library to interface other devices such as Iphone.
      1. Project very successful in enabling real-time phone communication to and from web applications.
   5. ***Android and Web Application Programmer, 2014 – current (****sole-contributor / on going****)***
      1. *ArfSync, (Open Source Project)*
2. *Designed and implemented Android and Web Application.*
   1. Created real-time features allowing web application(desktop browser) to:
      1. read and write Android contact information,
         * 1. send and receive SMS,

send and receive phone calls

and much more...

***Web Designer and Programmer, 2014***

*Southern Garden Tools, (Remote Project)*

Produced a Nodejs app to schedule remote LINUX administrative functions.

Implemented a MySql database/server for app statistics and logs.

Created a web interface for reporting and email response on error system.

***Web Programmer, 2013***

*Judson Co, Decatur, Alabama*

Produced solutions and code fixes for a proprietary web system.

Helped maintain and evolve an eCommerce site.

***Accounting and Production Analyst, 2008- 2013***

*UNICOR, Talladega, Alabama*

Created a successful add-on system to SAP for Accounting Department querying purposes.

Designed and implemented new database for querying and reporting of product analysis.

Wrote a VBA MsExcell/Access app that tracked all utilities and reported cross department billing.

Provided IT solutions for multiple departments.

## **Technical Studies and Research**

Embedded PIC micro-controllers, PIC 16 and 18 family chips

USB 2.0 implementation for firmware communication/LINUX driver development (URB)

LINUX kernel/driver development

Analog to digital/digital to analog interfaces and conversions

SPI, Microwire, I2c, RS-232/422/485 hardware communications

## **Education**

A+ certification by COMPTIA (PC hardware/software installation, repair, upgrade, maintenance and support.)

Universal EPA refrigeration licensed

DeVilbis 02 concentrator certification

## **Example Video of Current Project**

<https://www.youtube.com/watch?v=QqDo9CfyJRU&feature=youtu.be>