**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.

***Installation and Repair Technician / ISP Field Technician, 2001-2002***

*Mr. TV, Manchester, Alabama*

Field Support Technician for Internet service.

Performed installation and repair for security systems, satellites, custom audio and entertainment systems, computer networking and phone systems for commercial and residential sites.

System Phones and Data Networking.

## **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 References**

***ArfSync(Android/Web/App)***

***http://209.140.28.20:30061/arfsync/information***

***http://209.140.28.20:30061/jqm/arfsync***

***Cross Communication Demo***

[***http://209.140.28.20:30000/***](http://209.140.28.20:30000/demo)***demo***

***or***

[***http://209.140.28.20:30000***](http://209.140.28.20:30000/instruction)***/instruction***