FADDY MICHEL

COMPUTER SCIENTIST

faddy.michel@gmail.com / (347) 791-7348

Graphical User Interface is the dominant User Interface. Touch is the dominant Input Method. Visual Display is the dominant Output Method. People are not limited to the same Physical and Mental Abilities. As a result, Technology Users are getting Unfair Experiences varying from Very Rich to Very Poor. I devoted my Work to fight Accessibility —the Term that would have never been introduced to the Minds if the dominant Technology Makers' Minds were not limited to the previously stated Form of User Interface, Input Method and Output Method.

Facts

llk means Low-Level Knowledge. hlk means High-Level Knowledge.

Programming: bash (llk), GNU coreutils (llk), C (hlk), Java (llk), JavaScript (llk), Python (hlk), awk (hlk), Perl (hlk), SQL (hlk), Csound (hlk), lilypond (llk), HTML (llk), CSS (llk), LaTeX (llk).

Platforms: Unix/Linux (llk), AWS (hlk), Adobe CQ/AEM (hlk), Demandware (hlk), NetSuite (hlk), MySQL (hlk), Apache Cassandra (hlk), MongoDB (hlk).

Operating Systems: GNU Linux/Debian (llk), MacOS (llk), Ubuntu (llk), Windows (hlk), Android (hlk), iOS (hlk), JoliOS (hlk), Chrome OS (hlk), Firefox OS (hlk).

Projects

Terzi

Interacting with a GUI is similar to navigating a map. Sight makes it possible for shortcuts to exist throughout this map (e.g., move the mouse to a menu toolbar, expand it and move the mouse again to click on one of it's items.). For an unsighted, this is a problem affecting the most important factor in the market which is *productivity*. As an individual coming from the sighted world to the unsighted one and that I can observe the huge difference between the two experiences of using the computer, I had no choice but to work on finding a solution—giving no care to time and money.

After trying out GUI screen readers, the conclusion was that this is such a poor fix since it cannot compete the speed of vision. Since I am a computer scientist, I know the power of text when interacting with computers. So, I decided to travel back to the Golden Age of Computers ('60s–'90s) when text was dominating over graphics.

The journey lead me to use Debian/GNU Linux where graphics is just a complementary aspect. Since text here is dominating over graphics, it makes absolute sense that Debian is the only operating system I found on the web that provides speech output method from the very first step of usage which is booting and installing the OS itself.

Becoming a Terzi—meaning Tailor in Turkish and Egyptian—user is the scope of this ongoing project where I would be able to tailor my experience when interacting with my computer instead of being controlled and limited by GUIs. This is being achieved by mastering the console and bash (the most power-

ful program of all times in my opinion). All of the following projects follow the concept of Terzi.

Marmiton

To browse the World-Wide Web (w3), I could not find a textual browser that is as powerful as a graphical one. Fortunately, there is a way to extend graphical browsers to provide a textual experience. An HTML page is structured as a tree. Apparently, UI designers and frontend developers are not paying too much attention to how the tree would mentally look like, they pay more attention to how the page visually look like instead.

Marmiton—meaning Chef Assistant in French and Egyptian—is a browser extension that provides me with commands to browse the tree of a web page. These commands are similar to the commands: `[cd, ls, pwd, cat, rm]`. Additionally, commands for filling and submitting forms. Above that, I can connect from the terminal to Marmiton through a websocket connected to stdin and stdout.

Nashaz

Even Music Making and Sound Design got polluted and dominated by the graphical world leaving their mental, acoustic and tactile natures aside—no wonder how imitative music is presently.

Nashaz—meaning dissonance in Egyptian—is my fix to this intentional dilemma. It provides the commands to define music instruments, the various scales for a designed instruments, and either write or play a score with one of the scales and mix them gradually. This is being achieved using Csound, alsa and, of course, bash.

Employment History

AUG 2015--MAR 2016 **Senior Software Engineer at Poppin**

Demandware, NetSuite, Java SE, SOAP and REST.

MAR 2015--MAY 2015 **Senior Software Engineer at PM Digital**

Adobe CQ/AEM, AngularJS and NodeJS.

FEB 2015--JUL 2015 **Founder of Ballura**

Java SE, Apache Cassandra, Apache Solr and Java Jersey.

JAN 2013--DEC 2014 **Software Engineer at The Daily Beast / Newsweek**

Adobe CQ5, Java SE, Apache Solr, JavaScript, JQuery, HTML, DustJS, CSS, Less and Google Analytics.

JAN 2011--NOV 2011 **Junior Software Engineer at TekTrust**

Java, Appian, PHP, Elgg, HTML, CSS, JavaScript and JQuery.

AUG 2008--NOV 2008 **Intern Software Engineer at Atlantic Industries — The Cocacola Company**

PHP, XML, Microsoft SQL, HTML, CSS and JavaScript.