

# Internet of Things Project

Projects website: <http://sixofour.github.io/StudentSenseHat>

## Table of Contents

1. This File
2. References (generated when this file is exported)

## This File

This is a demonstration of a MarkDown (.md) README file.

Start editing this file by first installing Pandoc: <https://github.com/jgm/pandoc/releases/download/1.16.0.2/pandoc-1.16.0.2-windows.msi>

Second, install Texts: <http://www.texts.io/Texts-1.3.2.msi>

Now you can open README.md using Texts and modify it. You can also export a .pdf from the .md.

Ctrl-K can be used to modify Table of Contents entries/links, note that if a Table of Contents is not created in the .md file it can be generated during the export to .pdf process.

Ctrl-Shift-R can be used for adding citations. A citation example is for the publication that we have referred to in our proposals where visiting the DOI link below provides a page where a citation can be downloaded in the BibTex format. This .bib bibliography file can then be added to this file. Next the style .csl can be downloaded from <https://www.zotero.org/styles/apa> (Segura-Garcia, Felici-Castell, Perez-Solano, Cobos, & Navarro, 2015) <- this will become (Segura-Garcia, Felici-Castell, Perez-Solano, Cobos, & Navarro, 2015) plus the following entry will be added to the References when this file is exported to .pdf which also triggers the installation of XeLaTeX:

Segura-Garcia, J., Felici-Castell, S., Perez-Solano, J. J., Cobos, M., & Navarro, J. M. (2015). Low-cost alternatives for urban noise nuisance monitoring using wireless sensor networks. *IEEE Sensors Journal*, 15(2), 836–844. <https://doi.org/10.1109/JSEN.2014.2356342>

Regarding an example for the Fall 2017 session I use the below to generate the content which appears in the References List when the pdf is exported.

Current product APA citation: (Fried, 2017)

Existing research IEEE paper APA citation: (Gao, Arcos, & Nathan, 2016) Light Sensor (Kokhanovsky, Aoki, Hachikubo, Hori, & Zege, 2005) Water Sensor (Abou-Arkoub, Thorn, & Bousbaine, 2010) Web-Cam (Battaglia & Iannizzotto, 2012) MicroPhone (Gibbs, 2017) Time of flight (Zsedrovits et al., 2016) Ultrasonic sensor (Lee, Kim, Wang, Kim, & Baek, 2013) infra red sensor (Lee et al., 2013) fingerprint reader (Clark et al., 2010) RFID (Clark et al., 2010) servo (Wu, Law, Mak, & Martins, 2016) Analog Feedback Servo (Wu et al., 2016)

## References (generated when this file is exported)

Abou-Arkoub, A., Thorn, R., & Bousbaine, A. (2010). Online validation of multiphase flowmeters using simple capacitance sensors. *IEEE Transactions on Instrumentation and Measurement*, 59(10), 2671–2682. <https://doi.org/10.1109/TIM.2010.2045554>

Battaglia, F., & Iannizzotto, G. (2012). An open architecture to develop a handheld device for helping visually impaired people. *IEEE Transactions on Consumer Electronics*, 58(3), 1086–1093. <https://doi.org/10.1109/TCE.2012.6311360>

Clark, P. C., Cook, G. R., Fisher, E. L., Fulp, J. D., Linhoff, V., & Irvine, C. E. (2010). New pathways in identity management. *IEEE Security Privacy*, 8(6), 64–67. <https://doi.org/10.1109/MSP.2010.183>

Fried, L. (2017). PiTFT plus 480x320 3.5" tFT+Touchscreen for raspberry pi.; <https://www.adafruit.com/product/2441>.

Gao, S., Arcos, V., & Nathan, A. (2016). Piezoelectric vs. capacitive based force sensing in capacitive touch panels. *IEEE Access*, 4, 3769–3774. <https://doi.org/10.1109/ACCESS.2016.2591535>

Gibbs, W. W. (2017). Build your own open source turn-on-light-sensing controlled product for

*IEEE Transactions on Circuits and Systems II: Express Briefs*, 63(4), 351–355. <https://doi.org/10.1109/TCSII.2015.2504944>

Zsedrovits, T., Peter, P., Bauer, P., Pencz, B. J. M., Hiba, A., Gozse, I., ... Bokor, J. (2016). Feature article: Onboard visual sense and avoid system for small aircraft. *IEEE Aerospace and Electronic Systems Magazine*, 31(9), 18–27. <https://doi.org/10.1109/MAES.2016.150129>