**Ashvin Roharia**

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| EDUCATION |
| **University of Texas at Austin**  **August 2013 – December 2017**   * Bachelor of Science, Electrical & Computer Engineering – Overall GPA: 3.31 * Relevant Coursework – Digital Logic, Circuit Theory, Computing (ASM), Embedded Systems (ASM/C),   Embedded Systems Design Lab (C), Software Design (C/C++), Linear Systems & Signals (MATLAB), Algorithms (Java), SW Design II (Java), Software Testing(Java), Software Design Lab (Java)  Probability & Random Processes, Requirements Engineering, Senior Design (C++/Python) |
| WORK EXPERIENCE |
| **Silicon Labs (Austin, TX)** 1) *Firmware Engineer Intern 2) Firmware Engineer* **May 2017 – August 2017**   * + Setting up a new test platform (TP) to test capacitive sense touch (CPT) for IoT devices   + Updating old TP’s firmware to accommodate for the new TP’s CPT   + Developing python scripts to simulate and test “touches” on the CPT button board   **Intel (Austin, TX)** *Power & Firmware Intern* **March 2016 – August 2016**   * + Worked on the power management controller on a pre-silicon IoT soc   + Fixed multiple firmware bugs on Linux involving cloning, building, testing, and team communication   + Analyzed waveforms on Verdi to debug an issue   + Ran emulation test which involved cloning, changing parameters, and running scripts   + Documented emulation set up and presented it to the team   **AMD (Austin, TX)** *Server Validation & Debug Co-Op Engineer* **August 2015 – January 2016**   * + Involved in a customer issue as the sole tester for microcode patches in the team   + Loaded microcode patches, set conditional breakpoints in HDT, and helped brainstorm fixes for the issue   + Updated progress of the issue on JIRA daily as the head assignee of the ticket   + Tested SATA ports on “Seattle” ARM server chip revisions through python scripts for 2 bringups   + Tested and flashed boards with new firmware using Tera Term   + Built a GUI using XAML, C#, and python in Visual Studio to replace an outdated GUI used to test chips   + Documented my GUI in a technical manual with images and instructions   **Malauzai Software (Austin, TX)**  *1) Software Engineer Intern 2) Team Lead Intern* **June 2014 – August 2015**   * Assisted in the QA process of iPhones, iPad, and android apps and created JIRA tickets * Worked with mentor to fix bugs in objective-C and JAVA * Led a team of three interns to help our mobile banking company gain marketing intel * Used Ruby to automatize the process of looking up banks in the iTunes store - otherwise done by hand * Used HTML and CSS to create pages for a few customers’ mobile apps * Wrote an 11-page research report on the findings for the app research project  PROJECTS & SKILLS |
| **Smart IoT Bike Light & Android App January 2018 – Present**   * Modified firmware on the Wireless Gecko EFR32 SoC to design a red blinking bike light * Used Java and XML to develop an Android app to communicate to the SoC via Bluetooth   **Facebook API Data Gathering & Analysis August 2017 – December 2017**   * Worked on a Python script to convert a Facebook page into a CSV file * Used JavaScript to create interactive graphs based on the scraped data * Designed an HTML website for users to visualize the Facebook data analytics   **Acoustic Event Detection Algorithm & GUI February 2017 – December 2017**   * Developed a Python script to train a kNN (machine learning) and classify real-time audio * Developed a real-time Python GUI to display the mic audio signal, frequency spectrum, and classification   **GroupMe API Data Gathering & Analysis October 2015 – August 2017**   * Worked on a Python script to convert a group chat transcript into a JSON file * Created a Python script to display multiple stats analyzed from the JSON file * Designed a GUI for both scripts to allow for peer (soon to be public) usage   **Active Noise Cancellation Embedded System September 2016 – December 2016**   * Designed a PCB to interface between our code and the LCD screen, mic, headphones, DAC, ADC, etc. * Used C to develop the active noise cancelling algorithm * Filmed a YouTube video demonstrating and explaining the embedded system   **Autonomous Robot Car November 2014 – January 2015**   * Created an AI robot with photoresistors and infrared sensors to follow black tape and dodge obstacles * Used LabVIEW (visual programming) and a data acquisition device to control the system |