Jake Garrison

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# **Education**

M.S. Electrical and Computer Engineering University of Washington 2018

B.S. Electrical Engineering University of Washington 2016

# **Academic Experience**

* *Google Graduate Research.* Advised by Professor Patel, Google Health and Nest, 2017-2018
* *UbiComp Lab Graduate Research.* Advised by Professor Patel, Department of Computer Science, 2016-2018
* *Amazon Catalyst Entrepreneurship Finalist.* Advised by Professor Arabshahi, CoMotion, 2016
* *Department of Transportation Research.* Department of Computer Science, 2016
* *EcoCar 3 Autopilot Lead.* Advised by Professor Fabien, Department of Mechanical Engineering, 2016-2017
* *EcoCar 2 Electrical Lead.* Advised by Professor Fabien, Department of Mechanical Engineering, 2012-2015
* *Focused Ion Beam Research.* Advised by Professor Darling, Department of Electrical Engineering, 2013-2014

# Professional **Experience**

* *Google Health*. Research and Software Engineering 2018-present
* *Nest*. Research and Software Engineering, 2017-2018
* *Haiku Deck*. Software developer intern for Zuru AI feature, 2016
* *Puppy.ai*. iOS dog breed identifier app founder and developer, 2015-2018
* *Tesla*. Sensor Integration Intern, worked on autopilot and Model-X Doors, 2015
* *Tesla*. Power Electronics Intern, worked on supercharging and insane mode 2014
* *Verellen Amplifiers*. Built tube amps and analog audio, 2013
* *General Motors*. Chevy Malibu and Camaro electrification through EcoCar program, 2012 - 2016
* *Electric GTI Conversion.* Personal project completed in High School, 2010-2012

# **Publications and Scholarly Work**

## **Publications**

* Varun Viswanath, Jake Garrison, and Shwetak Patel. 2018. *“SpiroConfidence: Determining the Validity of Smartphone Based Spirometry Using Machine Learning”*. In Proceedings of the 2018 EMBC Conference on Engineering in Medicine and Biology Conference (EMBC '18). IEEE, New York, NY, USA, Paper 1262, 4 pages.
* Edward Jay Wang, Jake Garrison, Eric Whitmire, Mayank Goel, and Shwetak Patel. 2017. *“Carpacio: Repurposing Capacitive Sensors to Distinguish Driver and Passenger Touches on In-Vehicle Screens”*. In Proceedings of the 30th Annual ACM Symposium on User Interface Software and Technology (UIST '17). ACM, New York, NY, USA, 49-55.

## **Thes**i**s**

* Garrison, Jake., *Spiro AI: Smartphone Based Pulmonary Function Testing Thesis*  M.S. Thesis, University of Washington, Department of Electrical Engineering, 2018.