

# Yogesh Chellappa Chockalingam

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## EDUCATION

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- **University of Wisconsin-Madison** Madison, WI  
MS, Computer Science (Machine Learning specialization); GPA: 3.76  
May 2019
- **PES Institute of Technology** Bangalore, India  
Bachelor of Engineering, Computer Science; GPA: 3.68  
May 2015

## EXPERIENCE

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- **Intuit** Bangalore, India  
Software Engineer 2  
Aug 2015 - Aug 2017
  - **Desktop:** Delivered key business features on TurboTax Desktop including a tax query system and a screen sharing module for connecting users to tax professionals.
  - **Quality:** Improved product quality by roughly 40% by adding a tool for crash reporting, triaging and analysis.
- **Intuit** Bangalore, India  
Software Intern  
Jan 2015 - Jun 2015
  - **Web Services:** Imported business and financial data from QuickBooks into TurboTax using REST APIs. Reduced the time spent on preparing a tax return by 20 minutes and data entry errors by 15%.
- **GE Healthcare** Bangalore, India  
Software Intern  
Summer 2014
  - **Computer Vision:** Built a computer vision system using OpenCV to track patients in a hospital ward by aggregating multiple WebRTC based live video streams and applied background subtraction to track the patient. Attained 63% accuracy.

## PROJECTS AND PUBLICATIONS

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- **Text Synthesis from Lip Movements [Deep Learning, Computer Vision]**  
Compared traditional computer vision techniques vs. an end to end neural network for synthesizing text from lips movements, given a video clip. Used optical flow, spatio-temporal convolutional layers and a GRU based recurrent neural network. Attained a BLEU score of 0.27. [Project Wiki]
- **Tag Prediction for StackOverflow Questions [Machine Learning]**  
Developed a multi-class, multi-label ensemble classifier with support vector machines and decision trees to predict the tags of StackOverflow questions, given the question title and body. Attained an F1 score of 0.64. [GitHub]
- **Embedding Database Records [Databases, ETL]**  
Designed a scheme to embed database records and built a pipeline to perform error detection and error correction of dirty records. Obtained a 95% precision on error detection and 83% accuracy in error cleaning. [GitHub]
- **Driver Fatigue Detection System [Computer Vision, Robotics]**  
Developed a system using OpenCV to detect fatigue in drivers by uniquely combining eye tracking and blink detection, yawning detection, pulse rate and core body temperature of the driver. Achieved 80.55% precision and 97% recall with sub-second alerts being raised. Published at ICSIP 2016.
- **Question Pairs on Quora [Natural Language Processing, Deep Learning]**  
Detected pairs of questions on Quora which have the same semantics using a Siamese neural network with custom word embeddings and bidirectional LSTMs. Attained an accuracy of 64%. [GitHub]

## SKILLS

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**Languages:** Python, SQL, Java, Objective-C, C, C#, JavaScript, HTML/CSS, PHP

**Tools:** Keras, TensorFlow, Scikit-Learn, Jupyter, Flask, Power BI, Pandas, OpenCV, Git, P4V, MATLAB

## HACKATHONS AND AWARDS

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**Winner:** UW-Madison EnerHack (2018)

**Second Runners:** Harman World Hackathon (2016)

**Star of the Quarter:** Intuit (2015 & 2017)

**Winner:** Intuit Hackathon (2016 & 2017)