# VINCENT R. KOETEN

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## WORK EXPERIENCE

**Google** - Embedded Software Engineer May 2019 - Current
Designed and delivered key components of the firmware in conjunction with the runtime for the Edge Tensor Processing Unit (TPU).

**Momo Medical** - Embedded Software Engineer / Master's Student November 2017 - November 2018
Trained and utilized neural networks for classifying sensor data. Implemented and tested an optimization for executing neural networks specific to posture classification. Examined various sensor configurations to optimize data acquisition.

**Forze Hydrogen Electric Racing** - Embedded Software Engineer September 2016 - August 2017
Worked on a small team to redesign the power supply and distribution unit. Independently measured and built cable-trees from wiring connection schematics.

**Epic Systems** - Software Engineer Intern Summer 2015
Proto-typed the redesign of a native Windows application to a web platform using ASP.NET with a small team of interns. Modified core work-flow engine and implemented additional customization options.

## EDUCATION

**Master of Science in Embedded Systems** November 2018
Delft University of Technology, the Netherlands.
Thesis: Embedded Neural Networks for Continuous Patient Posture Classification

**Bachelor of Science in Computer Science** (Magna Cum Laude) June 2016
California State Polytechnic University, Pomona, United States of America.

## PROJECTS

**Electric Vehicle Charging** November 2017
Utilized Constrained Markov Decision Processes to optimize the coordinated charging of electric vehicles on a constrained electrical grid with a variable electricity price.

**Quadcopter** October 2017
Team lead in course project for developing the control software for flying and stabilizing a quadcopter using a joystick connected to a PC. Designed and implemented the custom message protocol over UART and the state machine controlling the safe operation and numerous flight modes.

**Lost Professor** May 2016
Provided algorithm design and led a small team in implementation of geographical pattern matching and shortest path calculation for a course project in parallel processing.

**Bronco Scheduler** January 2014
Implemented the initial algorithm for schedule generation during a hackathon for a web based application used by over 17,000 students in selecting classes.

## SKILLS

**Programming Languages**
C++ (advanced), C (proficient), Python (proficient), Java (proficient), Git (proficient), LaTeX (intermediate), HTML (basic), CSS (basic), Javascript (basic)

**Operating Systems**
MacOS (advanced), Linux (proficient) Windows (proficient),

## INTERESTS

Formula 1 Racing, Cooking and Baking Water Polo and Swimming,