

# VINCENT R. KOETEN

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## EDUCATION

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### 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.

## WORK EXPERIENCE

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### Momo Medical

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

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

Summer 2015

Prototyped 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.

## PROJECTS

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### Electric Vehicle Charging

November 2017

Utilized Constrained Markov Decision Processes to optimize the coordinated charging of electric vehicles on a limited electrical grid with changing 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.

### Groceries For Us

February 2015

Built a Java Spring REST API with MongoDB for a web based grocery list application designed to be easily sharable for households and roommates. Added cost-splitting for group purchases and specific items.

### 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

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### Programming Languages

Python (advanced), C (proficient), Java (proficient), Git (proficient), C++ (intermediate), C# (intermediate), L<sup>A</sup>T<sub>E</sub>X (intermediate), HTML (basic), CSS (basic), Javascript (basic)

### Operating Systems

MacOS (advanced), Windows (advanced), Linux (proficient)

## INTERESTS

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