

# Michael Skupien



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## My Personality

### I work from first-principles.

I pull apart new knowledge and ideas down to the fundamentals to challenge any assumptions and draw new insights.

### I seek out the hard problems.

I am intrinsically motivated to create novel solutions and learn new things while prioritizing effort on low hanging fruit.

### I grow big picture understanding.

When I am learning, teaching or motivating, I establish context around ideas and data. I see this as critical to driving deeper meaning, understanding and passion.

### I know and love engineering.

I have gained a broad knowledge base across many engineering disciplines allowing me to understand and adapt to new problems, environments and circumstances.

### I lead in tune with emotions.

I strive to be consciously aware of both my team's and my own emotions, from avoiding cognitive bias, to developing motivation, to how I manage conflict.

### I dream about what could be.

I have created new and innovative things routinely throughout my life. As my scope has grown with time, I create with a bigger vision, deeper purpose, and greater pragmatism.

## My Experience See [michaelskupien.com](https://michaelskupien.com) for more

### Bloomry - Founder, CEO

Jan 2023 - Jan 2024

- Ran 100+ customer interviews within mental health, pediatrics, and education while developing, iterating and pivoting on product prototypes
- Prototyped an AI video processing pipeline to extract a highlight reel of each child at daycare while automatically redacting select children
- Developed 50 agents specializing in a range of mental health issues which facilitated 3000+ conversations and 10,000+ messages on the GPT store

### Knockri - ML Engineer, Engineering Lead

Apr 2020 - Dec 2022

- Lead a cross-functional team of 8, taking product ideas from research to production, serving 100,000+ job candidates and hiring managers
- Designed and patented an AI scoring system to automate structured behavioral interview assessments and eliminate racial / gender bias while maintaining state-of-the-art correlation with on-the-job performance
- Developed an I/O psychology knowledge graph, active learning process, and annotator training / evaluation program to ground assessment creation / scoring in science, and to enable explainability of the AI output
- Architected and productionized backend features and services in a Python, Django, FastAPI, GraphQL, PyTorch Lightning and ONNX environment

### Dynamic Shotgun Microphone - Software Lead

Sep 2018 - Apr 2019

- Created a camera attachment that captures isolated audio of each human by tracking their location and digitally "steering" an array of microphones
- Developed and optimized a real-time multi-processed face and head tracking pipeline in Python running on an Nvidia Jetson TX2

### Uber ATG - Systems Engineering Intern

Fall 2017, Summer 2018

- Prototyped a range of safety critical proof-of-concepts for self-driving cars

### Autonomous Submarine Racing - Software Lead

Jan 2018 - Apr 2018

- Developed the autonomy stack for a submarine with camera perception, particle filter localization, and an LQR running on Android with ROS Java

### Electric Race Car (FSAE) - Engineering Lead

May 2017 - Nov 2017

- Developed a racing simulation in Matlab to understand vehicle performance as a function of many diverse architectural parameters
- Grew the team from 20 to 50 members and tripled annual sponsorship

### Varden Labs / Embark Trucks - Co-founder

Jan 2015 - Dec 2016

- Founded a YC startup, built a licenced self-driving semi truck in 9 months
- Architected the autonomy stack from perception down to vehicle control and developed the safety critical steering, throttle and brake interfaces

## My Education

### University of Waterloo

BSc Mechatronics (Robotics) Engineering + AI Option

April 2019

### Y Combinator (Varden Labs)

Winter 2016