

Kappi Patterson

Senior Software Engineer, Robotics. UK citizen, USA green card holder.

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EXPERIENCE

Waymo — Senior Software Engineer, Fleet Infrastructure

JAN 2017 - APRIL 2022

Technical lead of Fleet Orchestration team. Designed and built the systems that direct the individual autonomous vehicles, such that the behaviour of the fleet as a whole is optimized. Expert in distributed computing system design & production scale software.

Google Self Driving Car Project — Systems Engineering

SEPT 2015 - JAN 2017

Testing & validation of vehicle platform- brakes and steering. System requirements building. Launch readiness metrics tracking.

Pixar Animation Studios — Technical Director Intern

JULY 2013 - AUGUST 2013

Rotational program through all technical aspects of animated film production- modeling, shading, effects, lighting, simulation.

+ Internships at RetailMeNot and R/GA

EDUCATION

ETH Zurich, Switzerland — Robotics MSc

SEPT 2023 - CURRENT

Robot Dynamics, Embedded Control Systems, Vision Algorithms for Mobile Robotics, Planning and Decision Making for Autonomous Robots.

Stanford University, CA USA — SCPD Courses

Graduate level courses taken alongside enrolled Stanford students through the Stanford Center for Professional Development.

2019 - Mechatronics (Robotics). 2021 - Space Mechanics (Astrodynamics)

Brown University, RI USA — BSc Computer Science

SEPT 2011 - MAY 2015

RESEARCH

Distance Based Sound Separation — Google Research

Nominated Best Student Paper at Interspeech 2022 on using deep learning to separate sound by distance of source from microphone. [Link](#).

SKILLS

C++ (Expert), Python, Javascript, Java, C, Angular TypeScript.

ROS2, Matlab, Tensorflow, Coursera Machine Learning Certificate.

SketchUp, Maya, Houdini

PATENTS

Fleet management for autonomous vehicles

[US10545510](#), [US11157018](#), [US20220004200](#)

Managing and tracking scouting tasks using autonomous vehicles

[US11017674](#)

Generating scouting objectives

[US20220042821](#)

Multiple driving modes for autonomous vehicles

[US20190092341](#)

+4 more applications not yet public. 3 for Waymo, 1 for Sound Separation Research

OTHER

Classic car restoration: 1969 VW Bus, 1970 Mustang Grande.

[AMZ Driverless](#) (FSAE).

Estimation team, ETH Zurich.

Authored [James Webb Space Telescope tutorial series](#), advised by Dr Batalha, NASA