

# Paul Sammut

ROBOTICS ENGINEER

706 Washington St. Hoboken, NJ, 07030

☎ 646-421-5751 | ✉ paul.c.sammut@gmail.com | 🌐 www.paulsammut.com | 📷 paulsammut | 📱 paul-sammut

## Summary

---

Paul is a robotics engineer that has worked on underwater rockets, has started a consumer product hardware company and a robotics consulting company making marine research robots. He was born with a passion for anything with wires, software, and moving parts. He has over a decade of experience building many combinations of those three things. These projects have taken him on a never-ending learning journey spanning designing ROS autonomous systems, real-time control, embedded electronics, mechatronics, and software/hardware project management.

## Education

---

### Stevens Institute of Technology

BACHELOR OF ENGINEERING IN MECHANICAL ENGINEERING (AEROSPACE CONCENTRATION)

Hoboken, NJ

May, 2009

### Stevens Institute of Technology

MASTER OF ENGINEERING IN MECHANICAL ENGINEERING (ROBOTICS CONCENTRATION)

Hoboken, NJ

May, 2014

## Work Experience

---

### Stocker Freight

FOUNDER

New York, NY

2017 - 2018

- Raised FF seed round and founded Stocker, dedicated to creating an autonomous freight service for cities.
- Built a tech-demo street robot name Primo using ROS capable of operating autonomously in the street.
- Integrated multiple stereo cams, mono cams, IMU and other sensors to provide odometry fused with an EKF.
- Integrated RTAB-Map RGBD slam to create maps and localize within them.

### Robotics Consulting | Rockefeller University

ROBOTICS ENGINEER

New York, NY

2016 - 2017

- Acquired, managed and executed a robotics contract to create an autonomous catamaran for dolphin vocalization research.
- 

### Ramos Alarm Clock | Sammut Tech LLC

FOUNDER

Hoboken, NJ

2012 - 2016

- Invented a novel alarm clock that forced users up by use of a remote keypad.
- Created a successful Kickstarter and pre-order campaign raising \$200K in pre-orders.
- Setup a factory in New Jersey, managed 2 engineers and labor hires to manufacture product.
- Managed capital acquisitions, supply chain, manufacturing plans, inventory forecast schedules, and product strategy.

### Davidson Lab | Stevens Institute of Technology

SENIOR RESEARCH ENGINEER

Hoboken, NJ

2009 - Present

- Managed new technology projects from the specification phase to testing and validation.
- Conducted fundamental physics research on High Speed Supercavitating Vehicles (underwater rockets).
- Created instrumentation and control apparatus utilizing various sensors, pneumatic systems, still and video photography systems interfaced to separate RTOS and standard computers on a custom distributed network.
- Operated, maintained, and upgraded a fleet of UUVs operating in the Hudson River.
- Created HIL testing apparatus utilizing mathematical models to validate system performance.
- Designed electronic wiring systems for power, analog and digital comms and connector solutions.
- Wrote and supported mission critical launch control software for rocket systems.
- Designed and managed the creation of a control surface subsystem with humming bird level dynamic response.

## Institute Machine Shop | Stevens Institute of Technology

MACHINE SHOP APPRENTICE

*Hoboken, NJ*

*2007 - 2009*

- Machined parts based on provided drawings and learned fundamental concepts of Design For Manufacture

## Publications

---

2012 **Planing-Hull Forces and Moments on a Cylindrical Body in a Cavity**, CAV2012

*Singapore*

2010 **Remote Control and Monitoring of MOOS Vehicles through Cellular Modems**, MIT MOOS-DAWG

*Cambridge, MA*

2010 **Guidance of a UUV Using a Passive Acoustic Threat Detection System**, IEEE, WSS

*Carrara, Italy*

## Skills

---

### Software

C, C++, Python, ROS, OpenCV, Real Time Programming, Linux, CMake, Vim Enthusiast, VCS (Git, SVN), Mixed Signal DAQ Programming, LabVIEW, LabVIEW RT, LabVIEW FPGA, cRIO

### Hardware

PCB Layout (Altium, Eagle), MPLAB IDE, Logic Analyzers, Digital-comms (CAN, Serial, I<sup>2</sup>C, SPI), RF SoCs, uProcs, Power Circuits, Sensors (LiDARs, Force Torque, GNSS, IMUs, AHRS, 2D Cameras, Stereo Cameras, RGBD Cameras)

### Mechanical

Solidworks (16 years exp.), Fusion 360, Complex Tolerance Stacks, Underwater Systems, Precision Actuation Design (Ball screws, Linear Rails), Materials and Coatings

### Personal

US Security Clearance, USA and Maltese Citizen, Avid Rockclimber