

# Connor M. McCann

ROBOTICS • SOFT ROBOTICS • MECHANISM DESIGN • MEDICAL DEVICES

Harvard University, Mechanical Engineering | 472 Broadway, Unit 6, Cambridge, MA 02138

☎ (339) 223-5178 | ✉ cmccann@g.harvard.edu | 🏠 www.connor-mccann.com | 📺 connor-mccann

## EDUCATION

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### Harvard University

Cambridge, MA

PH.D. IN MECHANICAL ENGINEERING

2018-2024 (anticipated)

- Research Advisor: Prof. Conor Walsh
- NSF Graduate Research Fellow

### Yale University

New Haven, CT

B.S. IN MECHANICAL ENGINEERING (ABET ACCREDITED, *cum laude*)

2014-2018

- GPA: 3.87/4.00
- Research Advisor: Prof. Aaron M. Dollar

## HONORS & AWARDS

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| 2018 | <b>Donald Warren McCrosky Prize</b> , Yale School of Engineering and Applied Science            | New Haven, CT    |
| 2018 | <b>NSF Graduate Research Fellowship</b> , National Science Foundation                           | Washington, D.C. |
| 2017 | <b>Student Mechanism and Robot Design Competition, 2nd Place</b> , ASME IDETC Conference        | Cleveland, OH    |
| 2017 | <b>Belle and Carl Morse Junior Scholarship</b> , Yale School of Engineering and Applied Science | New Haven, CT    |
| 2017 | <b>Student Design Showcase, 3rd Place</b> , Design of Medical Devices Conference                | Minneapolis, MN  |

## RESEARCH EXPERIENCE

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### Harvard University, Biodesign Lab

Cambridge, MA

STUDENT RESEARCHER (ADVISER: PROF. CONOR WALSH)

2018 – present

- Developing novel modeling/design optimization strategies for multi-actuator soft robotic systems.

### Yale University, GRAB Lab

New Haven, CT

STUDENT RESEARCHER (ADVISER: PROF. AARON DOLLAR)

2015 – 2018

- Developing a novel Stewart platform-based robotic hand for dexterous 6-DOF, in-hand manipulation.
- Created a reconfigurable truss system for rapid assembly of lightweight, high-rigidity structures.

### Massachusetts Institute of Technology, Robot Locomotion Group

Cambridge, MA

RESEARCH INTERN (ADVISER: PROF. RUSS TEDRAKE)

Summer 2014

- Developed a computer model of a robotic bird for motion planning and simulation.

## INDUSTRY EXPERIENCE

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### Toyota Research Institute

Cambridge, MA

RESEARCH INTERN (ADVISER: MIT PROF. RUSS TEDRAKE)

Summer 2017

- Developed novel soft robotic tactile sensors for in-home robotic manipulation tasks.
- Gained experience fabricating various types of soft robotic sensing skins.

### Ekso Bionics

Richmond, CA

MECHANICAL ENGINEERING INTERN

Summer 2016

- Worked with engineering team to develop exoskeletons for medical and industrial applications.
- Designed and built an original cycle-testing apparatus for the company's *zeroG Arm* system to cycle that device through its full range of motion and simulate real world loading.

## PUBLICATIONS

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For a complete listing of publications and other engineering projects, please visit: [connor-mccann.com](http://connor-mccann.com)

## YALE COURSEWORK

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### Freshman Year

Multivariable Calculus	A-	Mechanical Design	A
Comprehensive General Chemistry	A-	Ordinary & Partial Differential Equations	A
Fundamentals of Physics	A-	Computing for Engineers & Scientists	A
Physics Lab	B+	Fundamentals of Physics	A-
Livy's Rome	B+	Physics Lab	A
Introduction to Linguistics (summer)	A	Writing Seminar (summer)	A-

### Sophomore Year

Strength & Deformation	A	Linear Algebra	A
Computer-Aided Engineering	A	Introduction to Computer Engineering	A
Independent Research	A	History of the English Language	A
Introduction to Material Science	A-	Material Science Lab	A-
Thermodynamics	B	Data Structures & Programming Techniques	(Cr) *

### Junior Year

Advanced Robotic Mechanisms **	A	Fluid & Thermal Energy Science	A
Medical Device Design	A	Mechatronics Lab	A
Fluid Mechanics	A	Dynamics	A
Introduction to Electronics	A	Fluid Mechanics & Thermodynamics Lab	A

### Senior Year

Independent Research	A	Independent Research (cont.)	A
Language and Computation	A	Design Process & Implementation	A
Introduction to Architecture	A	Neural Networks & Language	(Cr) *
Communication, Computation, & Control	(Cr) *	Intensive Introductory Statistics	(Cr) *

\* Courses marked "(Cr)" were taken under Yale's Credit/D/F grading option

\*\* Indicates graduate-level course taken in Yale's School of Engineering and Applied Science