

Anna BRILL

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EDUCATION

- MAY 2018 Candidate for MSE in MECHANICAL ENGINEERING AND APPLIED MECHANICS, **University of Pennsylvania**, School of Engineering and Applied Science.
Concentration: Design and Manufacturing
- MAY 2017 BSE in MECHANICAL ENGINEERING AND APPLIED MECHANICS, **University of Pennsylvania**.
Relevant Courses: Design for Manufacturing, Introduction to Robotics, Mechatronics
- MAY 2012 Graduate of **Massachusetts Academy of Mathematics and Science** at WPI, Worcester MA

EXPERIENCE

- JUN-AUG '17 | Hardware Intern at BIOBOTS, NOW ALLEVI
Developed initial plans for production of second-generation desktop bioprinter
Designed, prototyped, and tested heated bed system for bioprinter
Performed design reviews and validation of bioprinter subsystems for manufacturability
- 2016-2017 | Mechanical Engineering Senior Design Project at UNIVERSITY OF PENNSYLVANIA
OXcopter: an efficient personal delivery vehicle
Participated in the development of a novel multirotor vehicle for efficient payload delivery
Machined and assembled custom components and subsystems
Designed and executed thrust stand and full vehicle experiments, analyzed results
- MAY '15-AUG '16 | Robot Specialist at MUSEUM OF SCIENCE AND INDUSTRY (MSI), Chicago
Managed daily operation and use of exhibit robots for guests
Diagnosed, resolved, and documented hardware and software problems
Developed and followed preventative maintenance plans
Recommended and performed robot improvements and software upgrades
Interacted with exhibit guests and conveyed exhibit content
- 2013-CURRENT | Research Assistant at KODLAB, GRASP LABORATORY
Expanded MATLAB simulation of monopedal hopper to explore gap crossing behavior
Published and presented research on vocabulary of leaps for a tailed bipedal robot
Maintained robots and diagnosed and repaired problems
Led weekly robot hikes and compiled videos and technical reports for each
Experimented with behavior of six-legged robot on low friction surface
Supported development of museum exhibition featuring laboratory robots

PUBLICATIONS

- IROS 2015 A. L. Brill, A. De, A. M. Johnson, and D. E. Koditschek, "Tail-Assisted Rigid and Compliant Legged Leaping," in *Proc. IEEE/RSJ Intl. Conf. on Intelligent Robots and Systems*, 2015

RELEVANT SKILLS

- SOFTWARE MATLAB; SolidWorks; Subversion; COMSOL; Onshape; Adobe Illustrator and Photoshop; Affinity Designer; Microsoft Office; Jekyll; HTML; CSS; \LaTeX
- ENGINEERING LAB Lathe; Manual Mill; ProtoTrak Hybrid CNC; Bandsaw; Drill Press; Fiberglass and Carbon Fiber Composite Manufacturing; 3D Printing; Laser Cutting; Soldering; Sewing