Michal Adamkiewicz

P.O. Box 16430, Stanford, CA 94309, United States
Email: mikadam@stanford.edu Int. Tel: +48 697 064 060
US Tel: +1 (650) 690-0142 Date of Birth: 21.08.1998
Website: www.adamkiewi.cz

Education

Stanford University	Electrical Engineering — BS (2020, GPA: 3.91) + MS (Ongoing, GPA: 3.94). Classes Include: AA203 Optimal Control, EE364a Convex Optimization, PHYS170/171 Statistical Mechanics Sequence, PHYS210 Lagrangian Mechanics, TAed CS240 Advanced Topics in Operating Systems

Experience

IPRL and MSL Stanford Labs	May 2021 - Current - As part of a Stanford lab working towards novel environment representations for robotic navigation and manipulation. Recently accepted work to RA-L and ICRA 2022 https://mikh3x4.github.io/nerf-navigation/
Windborne Systems	July 2020 - March 2021 and Summer 2019 - First employee at climate data startup. Worked on flight hardware and designed manufacturing/launch tools and procedures. As the only engineer responsible for a balloon autolauncher robot, developed and documented its mechanical, electrical and software design from scratch.
Reliable Robotics	Summer 2018 - Worked on flight software system for a crewed autonomous aircraft. Wrote system code that effected the entire system, prototyped the radio communication system and worked to characterise inertial measurement sensors
Nvidia	Summer 2017 - Interned in the fast kernels group as a deep Learning Architect, analysing performance and optimising deep learning kernels in assembly
Cantab Capital Partners	Summer 2016 - Developed python static code analysis, system visualisation tools
Research at UC Berkeley	Summer 2015 - Researched Cryogenic 3D printing. This resulted in a paper in Journal of Cryobiology [Volume 71, Issue 3], a pending patent [US20180304537]

Projects

Stanford Robotics Club	Club President - Completely restructured the club, overseeing 4 project teams, organising events, recruitment. Initiated and co-led 10-15 person Rover team that won 3rd place internationally and 1st in the US in the University Rover Challenge 2019 having designed and built an all terrain robot with a 6 axis manipulator.
Stanford Space Initiative	Community Manager of the student run club, worked on the embedded code of endurance record breaking high altitude balloon (Valbal). Over summer 2017 designed the mechanical structure of an optical communication cubesat
Processor	Designed and built an 8bit processor from ~700 discrete SMD transistors to teach myself about digital design and to experience old-school computer programming
Coding	Personal projects include a graph based Lidar SLAM, a lightweight robotics communications library, barebones OS on baremetal Raspberry Pi, liquid rocket control interface, complier from a LadderLogic-like environment to PIC assembly
Hardware	Projects include: robotic arms, custom 3D printer, various mechanical puzzles, a holonomic couch, telepresence robot, educational kits, CNCed decorations

Skills and Interests

Computer Science	Python (including popular external libraries: numpy, matplotlib and PyTorch), C/C++, ARM Assembly, Matlab, UI/UX design, Comfortable with linux, ROS, Git
Engineering	Solidworks and Fusion 360 (including FEA simulations and CAM), AutoCAD, Design for 3D printing (FDM & SLS), laser/waterjet cutting, CNC machining; Digital Circuit and PCB design: Altium, KiCAD; Mechatronic system design
Maths	Intuitive and formal high level understandings of mathematics including vector calculus, linear algebra, probability, number theory, differential equations