

Gokai Wami

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Current Address:

10 Buick Street Boston, MA 02215

Permanent Address:

401 E 82 ST New York, NY 10028

A practical and versatile mechanical engineering graduate with significant experience in team project-based work.

EDUCATION:

Boston University, Boston, MA

Bachelor of Science in Mechanical Engineering (BSME)

GPA 3.23/4.00 Expected Graduation Date: May 2022

Johns Hopkins Engineering Innovation Program, Frederick, MD

Accredited Engineering Program

GPA 3.00/4.00 June 2017 – August 2017

PROFESSIONAL LICENSE/CERTIFICATES:

The Massachusetts DOT / MBTA Project Management Certificate

June 2021

The Massachusetts DOT / MBTA Safety Management System (SMS) Fundamentals for All Employee Certificates

June 2021

The Massachusetts DOT / MBTA Conflict of Interest Law – State and County Employees

June 2021

TECHNICAL SKILLS

- Programs: Automation Direct, Arduino, C, Creo Parametric, e-Builder, GibbsCam, GRANTA EduPack, iNspect Express, MATLAB, Microsoft Office, SOLIDWORKS
- Manufacturing: Casting, CNC, Drill Press, Grinders, Lathes, Mills, Shears, Universal Robots, Wire EDM, 3-D Printing
- Languages: Japanese (Proficient), Chinese (Intermediate)

PROJECTS

2.5-Axis 3-D Printer Project

Product Design Engineer

January 2021 – May 2021

- Designed and prototyped a mechanical sub-system embodying joints, shape rationality, and electrical components
- Actualized a SOLIDWORKS motion study, design study, and parts assembly of the 3-D Printer

Torsional & Axial Load Ideal Shaft Project

Coder & Materials Tester

September 2020 – December 2020

- Coded a MATLAB script that called a material's properties and calculated the displacement, angle of twist, and stress
- Tested over 40 different materials using an online database to determine a shaft of the lowest possible weight

Screwdriver Analysis Project

Website Developer & CAD Engineer

April 2020 – May 2020

- Precisely measured and modeled over twenty components of the screwdriver using Creo Parametric 5000
- Expertly created Creo Parametric drawings with cross-sections, magnified views, and proper dimensional tolerances
- Composed a working, real-time mechanism of the screwdriver gearbox
- Designed a professional website demonstrating the findings, analysis, and research of the screwdriver in an organized manner

Soda Straw Truss Design Project

Programmer & Researcher

January 2020 – May 2020

- Collaborated with a computer engineer to design a truss structure capable of withstanding 28.8 newtons of weight before yielding (class record)
- Improved load-to-cost analysis by minimizing cost while maintaining structural integrity

Human Powered Charger Project

Team Leader & Parts Assembler

September 2019 – December 2019

- Oversaw a team of electrical, computer, and mechanical engineers by assigning tasks based upon their specialized skills
- Obtained all parts and materials necessary for the build of the charger, taking into account the material properties
- Synthesized a bill of material, function-means chart, and circuit schematic based on the project constraints and objective
- Successfully constructed a temperature resistant, IPX4 water resistant human powered charger with an output of 50W

EXPERIENCE

Massachusetts Bay Transportation Authority

Capital Delivery Project Management Intern

June 2021 – August 2021

- Designed workflow diagrams within e-Builder to automate contractor and consultant evaluations
- Migrated data, documents, and processes from an outdated network drive to the new MBTA e-Builder platform
- Assisted Project Managers in assessing PMIS implementation status for each project and develop a project-specific implementation plan
- Validated project details information using construction invoice process reports, Master Schedules, contracts, etc.

Not Forgotten Digital Preservation

Research & Technical Writing Intern

February 2021 – June 2021

- Optimized short to long-term design solutions based on cost, constraints, and functionality parameters
- Mapped the direction of future technology through intensive research and interviews with leading experts
- Documented the findings by detailing the groundwork in weekly scientific reports and presentations

ACTIVITIES/AWARDS

- Activities: BU Taiwanese-American Student Association, BU Japanese Student Association
- Awards: Bronx Science 3D Design Award