Anisha Nakagawa

anisha@students.olin.edu | 617.823.8373 | anishan.github.io

EDUCATION

OLIN COLLEGE OF ENGINEERING | May 2018 BS IN ELECTRICAL AND COMPUTER ENGINEERING, 3.9 GPA

CAMBRIDGE RINDGE AND LATIN HIGH SCHOOL | 2014

Valedictorian, 4.0 unweighted GPA, First Honors

EXPERIENCE

MIT MEDIA LAB - CHANGING PLACES | UNDERGRADUATE RESEARCH June 2016 - present

- Modelled traffic during regional evacuations due to natural disasters
- Developed agent-based model for congestion by applying the queueing model
- Created visualization for the simulation by displaying geospatial data in processing

DRAPER LABORATORY | SOFTWARE ENGINEERING INTERN

May 2015 - Aug 2015

- Designed and developed a web-app and Google glass app to display dynamic visual cues, using human-centered design techniques
- Created web-app to receive signals asynchronously through a WebSocket
- Developed android application, interfacing with embedded sensors

DRAPER LABORATORY | Summer Research Intern

Jul 2013 - Aug 2013

- Implemented path-planning and navigation algorithms on robot, using ROS
- Interfaced with graduate students' work, evaluated success, presented results

OLIN COLLEGE | TEACHING ASSISTANT

2015 - 2016 | Linearity 1, Modeling and Simulation, Electricity and Magnetism

PROJECTS

NATURAL RESOURCE MODELING | INDEPENDENT STUDY - 2016

Studied different mathematical models for modeling resource use, especially in the context of agriculture and food systems. Researching a system and constraints, in order to design and implement a mathematical model.

NEWS ARTICLES SENTIMENT ANALYZER | SOFTWARE DESIGN - 2015

Created algorithm to compare news sources using sentiment analysis of articles, to highlight trends and determine bias.

REFUGEE DATA VISUALIZATION | DATA VISUALIZATION - 2015

Displayed dynamic and interactive map of refugees moving around the world over time, from UN data.

RECIPE-FINDER PROGRAM | SOFTWARE DESIGN - 2015

Created web-app to search database of recipes with Mongo DB, filter by user specifications, and interface with web GUI with Flask.

MODELING WOLF POPULATIONS | MODELING AND SIMULATION - 2014

Modeled the effect of re-introducing wolves into the Yellowstone ecosystem, and changes in elk and aspen populations. Validated the model with data.

COLOR-CHANGING CHAMELEON TOY | Design Nature - 2014

Designed game experience using biomimicry. Controlled color-changing LEDs using ATMega328 microcontroller (programmed with Arduino).

SKILLS

Languages

Java, Python, C++, C (Arduino), MATLAB, HTML, CSS, Javascript Tools

Git, LaTex, COMSOL, Mathematica Platforms

Arduino, Raspberry Pi, Processing, Android (Google glass)

RELEVANT COURSES

Olin College

- Software Design
- Modeling and Simulation
- Data Visualization
- Sensors, Instrumentation, and Measurement
- Electricity and Magnetism
- Principles of Engineering
- Discrete Math (Fall 2016)
- Computer Architecture (Fall 2016)

Harvard University

- Multivariable Calculus
- Linear Algebra and Differential Equations

LEADERSHIP

NET IMPACT BY DESIGN

President

Created new chapter to promote engineering build projects with a social or environmental impact. Leading the research and design for the electrical system of an aquaponics ecosystem.

SUSTAINABILITY CLUB

Co-President

Included in periodic meetings with college CFO, Head of Facilities, and Sustainability Steering Committee. Promoting on-campus sustainability through initiating reusable mugs program and drying racks programs.

AWARDS

- Education First Environmental Challenge Winner (attended Global Student Leaders Summit in Costa Rica)
- SWE Scholarship Recipient
- National Merit Scholarship Recipient
- Harvard Edward Kingman Scholarship Recipient