

Anisha Nakagawa

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

EDUCATION

OLIN COLLEGE OF ENGINEERING | DEC 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)

PUBLICATIONS

A. Nakagawa and J. I. Winder,
"Hurricane Evacuation Traffic Model,"
in 2016 IEEE MIT Undergraduate
Research Technology Conference,
Cambridge, MA, 2016.

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

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