

ASHANK BEHARA

119 Gilbert Avenue, Santa Clara, CA 95051 | (669)-226-1554 | abehara2@illinois.edu

Website: <https://abehara2.github.io> **LinkedIn:** <http://linkedin.com/in/ashankbehara>

EDUCATION

University of Illinois (UIUC)
Aug. 2018 - Dec. 2021 *3.40/4.00*
B.S in Mechanical Engineering
Minor in Computer Science

SKILLS

Modeling and Analysis
CREO, Solidworks, Autodesk Inventor
APriori, Moldflow, Cura, Vicon

Languages, Frameworks, and Tools
Java, Python, Matlab, Octave
Javascript, Flask, React, HTML, CSS
SQL, Shell, Android, Git, MongoDB,
Pandas, SciKitLearn, C++

COURSEWORK

Mechanical Engineering
Thermodynamics
Statics
Design for Manufacturability
Computer Aided Design
Multivariable Calculus
Differential Equations
Linear Algebra (In Progress)
Fluid Dynamics (In Progress)
Dynamics (In Progress)

Computer Science
Intro Programming (Python/MatLab)
Intro Programming (Java)
Discrete Structures
Data Structures (In Progress)

CERTIFICATIONS

Databases and SQL for Data Science
Python for Machine Learning (In Progress)

ORGANIZATIONS

Neurotech @ UIUC [VIEW]
Vice President
• Writing machine learning scripts and building hardware with data from BCI headsets, managing projects and inter-team integration
i-Made
Engineer
• Prototyping and designing medical technology solutions from Carle physicians and UIUC faculty
ASME
General Member
ACM
General Member

WORK EXPERIENCE

Hack4Impact **September 2019 - Present**
Software Developer *Urbana, IL*

- Developing and shipping software to non-profit organizations
- Full stack development using Flask, React, SQL, MongoDB, Node.js

DPQL Laboratory **June 2019 - December 2019**
Undergraduate Research Assistant *Urbana, IL*

- Assisted FindWheels study tracking wheelchair falls and improving safety
- Data Analysis and signal processing from Vicon using Matlab and Octave

RAAD Systems **June 2019 - August 2019**
Mechanical Engineering and Robotics Intern *San Jose, CA*

- Redesigned cheaper model of UR10 6-axis robot using Autodesk Inventor
- Performed inertial, torque, and mechanics analysis in Matlab for appropriate harmonic drive motor selection and performance

UPenn GraspLab **June 2017 - August 2017**
Summer Research Intern *Philadelphia, PA*

- Scripted Vicon system user guide, assembled Minitaur robot, analyzed data from fleets of drones

PROJECTS

Kids Save Ocean **January 2020 - Present**

- Developing full stack web application to empower environmental health
- Using tech stack of Next.js, Node.js, and MongoDB
- Focused on backend development, wrote backend schema and currently writing API and endpoints

DiaProb [VIEW] **January 2020**

- Developed Diabetes Probability Predictor using machine learning
- Generated a Logistic Regression model using SciKitLearn/Pandas and a dataset from Kaggle
- Built functional interface that is currently being hosted with HTML/CSS

Carpool4UIUC [VIEW] **September 2019 - December 2019**

- Developed ride-sharing web application for UIUC students
- Used tech stack of React, Flask, and MongoDB
- Focused on frontend development and implementing Google OAuth and aided writing RESTful API and NoSQL database design

Genusim [VIEW] **November 2019**

- First place in UIUC Autodesk Designathon
- Developed knee injury simulator and web app controller to simulate ligament injuries using Fusion360 and HTML/CSS.

Tremor-Adapting Cane [VIEW] **August 2018 - December 2018**

- Designed a self-stabilizing cane using CREO Parametric for Parkinsons patients
- Created CAD model, engineering drawings, BOM, PDS, and Pugh Matrix.

Redesign for Recyclability [VIEW] **January 2019 - May 2019**
ME270

- Redesigned mechanical pencil using CREO for improved assembly efficiency
- Performed 2k factorial Design of Experiments and DFMA analysis
- Learned multiple methods rapid prototyping and machining (CNC Mill, Lathe)