Neil Johari

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education

University of Michigan 2018 - 2021
B.S.E in Computer Science [Sophomore]
GPA: 3.7 / 4.0
Current Coursework: Data Structures &
Algorithms, Intro to Computer
Organization, Intro to Electronic Circuits
Completed Coursework: Programming &
Data Structures, Discrete Math, CS
Pragmatics, Differential Equations, Intro
to Stats

Syosset High School 2014 - 2018
Highest Honors, Mastery in Science
GPA: 8.636 / 8.0

languages

C++, Java, Ruby, Python, MATLAB

proficient tools

git, vim, tmux, LaTeX, Premiere Pro

awards

Dean's Honor List 2019
For maintaining above a 3.5 GPA with a
minimum of 12 graded credits per semester

**Nassau County
Legislature Citation** 2019
For leadership and community engagement

**Bernie Goudreau
Memorial Award** 2018
For achievement in math and CS

**1st Place at Andromeda
2nd Place at WAC** 2017
For the creation of a machine learning model
to analyze MRI scans of Alzheimer's disease
patients using convolutional neural networks

**Gold Medal at
Al Khalfus Math Fair** 2015
For the creation of a model of video game
hours played due to social influence with an
analysis through machine learning

experience

University of Michigan 2019 – now
Instructional Aide for ENGR 100
- Produce high quality tutorial videos and lab manuals on Serial
  Peripheral Communication and GPS
- Revamp lab activities by identifying student struggles in lecture
  and lab to improve clarity and maximize learning
- Lead two lab sections with 25 students each (teaching & grading)
- Hold office hours

Researcher
- Pioneered a library for RFID communication via MFRC522 sensor

MBuRST 2019 – now
Project Lead
- Selected by Professor Ridley to design a weather balloon payload
  to determine the most cost-effective GPS module

Triangle Engineering Fraternity 2019 - now
Website Master Chairholder
- Elected to design the fraternity's new website using Ruby on Rails
  (RoR) and PostgreSQL, deployed via Heroku
- Architected layout to direct traffic towards recruitment pages

Syosset High School 2014 - 2018
Website Developer
- Selected by Dr. Durante to lead design and implementation of the
  new Syosset website utilizing RoR, MongoDB, and Redis
- Responsible for 280+ commits with 24,000+ changes
- Designed a sleek and ADA-compliant accessible interface

Researcher
- Developed a machine learning (ML) model to analyze MRI scans
  of Alzheimer's disease patients

open source personal projects

Spacecat 2019 - now
- Designed software to read and serialize sensor data using Google's
  Protobuf for a high-altitude weather balloon

Scram 2016 - now
- Programmed a transparent Ruby permissions system gem

Mongoid Forums 2014 - 2015
- Developed a RoR gem for forums with MongoDB integration

AutoBroadcaster+ 2012 - 2014
- Published a Minecraft server-wide scheduled broadcasting plugin
- Downloaded 227k+ times