

GILVIR GILL

LANGUAGES

Java, Python, Go, C, JavaScript, TypeScript, C++, MATLAB/Octave, Scheme

TOOLS & FRAMEWORKS

MongoDB, SQL, ORM, Git, Docker, Node, Flask, Nginx, React, GraphQL (Graphene, Apollo Client), MobX, Maven

OTHER SKILLS

Arduino, Robotics, G Suite, HTML, CSS, Unix, Machine Learning, Computer Vision, Illustrator, Photoshop, AutoCAD, SolidWorks

CELL

+1(347) 484 - 8582

EMAIL

personal@gilvirgill.com

GITHUB

github.com/Gillgamesh

LINKEDIN

linkedin.com/in/gilvir-gill

WEBSITE / PROJECTS

gilvirgill.com

EDUCATION

STONY BROOK UNIVERSITY

Aug. 2018 - Present

GPA 3.97 Major GPA 4.0

Relevant Courses Multivariate Calculus, Differential Equations, Linear Algebra, Mathematical Foundations of C.S., Data Structures & Algorithms, Finite Math Structures, Statistics, Theory of Computation (Automata/Languages). Member of C.S. Honors program.

Working with a cross-disciplinary research team to create a standardized framework for political data. Pursuing a B.S. in C.S. and Math, with minor in Political Science.

SAT 1540/1600 (21/24W)

Relevant Courses Systems Level Programming (C); Computer Graphics; AP Macroeconomics, Computer Science, Calculus, Physics C Mech/E&M, World History, U.S. History;

Extracurriculars FTC Robotics President, writer for school newspaper, Cricket Vice-captain, Student Union IT Director.

STUYVESANT HIGH SCHOOL

Sep. 2014 - Jun. 2018

WORK

ENGINEERING MENTOR

Kinet-X
Jul. 2017 - Present

Develop curriculum and lead courses on Arduino for 20+ students (grades 6-11) using Arduino IDE/C and various sensors, motor controllers, and other electronics. Have also taught 100+ beginner students (grades 4-7) basic electronics through fun, hands-on projects over three sessions. At the end of the programs, we help students create robots, solar-powered cars, and more using what they learned in previous weeks.

EXPERIENCE

IT DIRECTOR

Stuyvesant SU
Jul. 2017 - Jul. 2018

Wrote an automatic seat assigner in Python for over 3000 students, parents, and faculty attending graduation at Carnegie Hall, allowing us to do reserved seating for all for the first time. Using Flask, SQLAlchemy, Jinja, and jQuery, created StuyActivities.com, an activity manager that integrates club approval, member management, meetings and room reservation, and extracurricular attendance into one convenient site for both faculty and students.

ADMINISTRATOR

Emenbee Realms
2013 - 2017

Managed several CentOS/Ubuntu dedicated servers used to host a Minecraft server network with over one million unique players from 139 countries and a peak of 1400 concurrent users.

Developed server plugins in Java to enhance the user experience, such an Elo system for competitive minigames and an AI anti-cheat that uses convolutional neural networks to detect suspicious movement, aiming, and combat-related interactions with other players.

LEAD PROGRAMMER NYCIML

Dec. 2018 - Present

Creating a scoring website for IML/ARML-style individual-round mathematics competitions, employing Flask, SQLAlchemy, and Graphene for providing a GraphQL API for our front-end. Created a custom validation system to elegantly combine the Cerberus validation library with Graphene. Developing a React front-end to replace an older Jinja prototype, with Apollo Client and MobX for fetching, caching, and state management. The website will be used by coaches to manage teams and students, and upload contest scores to be viewed by the public.

ACHIEVEMENTS

BIODIVERSITY CHALLENGE WINNER

Junior Academy
2017

Worked with a small team of international students and designed a solution to cheaply monitor freshwater ecosystems in order to preserve biodiversity, primarily using off the shelf parts. Placed first out of hundreds of teams and presented our project to a panel of tech executives.