

# LUVNEESH MUGRAI

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<https://github.com/LuvneeshM>

## EDUCATION

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New York University Tandon School of Engineering Brooklyn, NY

### Bachelor of Science

May 2019

- Major: Computer Science      ▪ Minors: Game Engineering; Integrated Digital Media
- GPA: 3.89
- Courses: Design and Analysis of Algorithms; Linear Algebra and Differential Equations; Data Structures and Algorithms; Discrete Mathematics; Object-Oriented Programming

## TECHNICAL SKILLS

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Software: Linux/Unix; Microsoft Office; Git/GitHub; Android Studio; Unity3D; Slack;  
Adobe Creative Cloud; Visual Studios

Programming: C/C++; C#; Java; Python; HTML; CSS; JavaScript

## WORK/RESEARCH EXPERIENCE

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### Gilly Works

#### Co-Founder/CTO

Dec. 2016 – Present

- Game Designer/Developer – Color Drift
- Game Designer/Developer – Gilly Connect

### New York University Game Innovation Lab

Brooklyn, NY

#### Artificial Intelligence Assistant Researcher

Dec. 2016 – Present

- Developing an artificial intelligence to mimic human gameplay
- Responsible for implementing algorithms such as Breadth First Search, A-Star, Iterative Depth First Search

### New York City Department of Parks and Recreation

New York, NY

#### Game Design Intern

July 2016 – Aug. 2016

- Taught game design logic to a class of 25 youth and teen members
- Assisted students in creating their own video games using RPG Maker VX Ace
- Coordinated with instructor to support content generation and generate interest in game design, while implementing teamwork dynamics

## PROJECTS

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### Color Drift – Unity/C#

- Color-based reaction game, in which the player taps circles the same color as them
- Developed space-efficient and optimal algorithm for user input and endless gameplay

### Gilly Connect – Unity/C#

- Multi-directional version of connect four, with one- and two-player modes
- Worked with team to design 3 versions of the artificial intelligence opponent
- Responsible for coding game logic for two player mode, ball movement, and winner check

### BestNameEver – Python/Pygame

- Worked with a teammate to design an endless single player two-dimensional shooter game and a user-friendly tutorial level
- Redesigned player-input algorithm to support multi-directional movement while shooting
- Developed a tracking algorithm, optimizing enemy movements to move toward the player

### XNA 3D Space Shooter – C#

- Designed an 3-D asteroid shooter utilizing use of matrices to optimize smooth translations, rotations, and scaling during gameplay