Rafael Mota

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EDUCATION

NYU Tisch School of the Arts   **May 2016**
BFA, Game Design   *New York, NY*
- Minor: Computer Science and Math
- C-STEP Scholar
- Commuter Assistant

Barnard College   **2002 - 2008**
- STEP Scholar   *New York, NY*
- Astrophysics Research Internship

American Museum of Natural History   **2002 - 2008**
- Hayden Astrophysics Scholar   *New York, NY*

WORK EXPERIENCE

Giant Machines   **May 2023 – Present**
Fellow / Instructor - High School and College   *New York, NY*
- Constructed lesson plans and taught HTML, CSS, Python, Flask, and Javascript for students ranging from Highschool to College level. To make the lessons more accessible, I gamified many technical concepts so that students would be able to grasp the material faster and more organically.
- Worked in association with Citadel, SEO, and Success Academy to teach exceptional students from various highschool and college institutions including Yale, Harvard, MIT, NYU, etc.
- Conducted an Interview Skills course covering key algorithms and data structures for college students.

The Smith School   **Sep. 2016 - Aug. 2023**
Computer Science Head   *New York, NY*
- Acted as principal IT specialist. Responsibilities included:
  - Managing the school website, routers, wifi, and printers.
  - Monitoring the school's server and providing teachers with access to accounts.
  - Updating and providing assistance with mac, pc, and smartboard issues.
  - Preparing students and teachers for remote learning through ZOOM and Google Hangouts.
  - Recording and streaming live events.
- Designed and taught CS curriculum for grades 6th - 12th, including Tech Competence, HTML/CSS, JavaScript, Java, and Python.
- Created, pitched, and taught highschool Astrophysics, Game Design, and Public Speaking courses.
- Hosted various school wide events as the MC and coordinator.

American Museum of Natural History: Science Alliance   **Sep. 2014 - 2020**
Instructor - Middle and High School   *New York, NY*
- Educated middle school students in Astrophysics, Engineering, and Anthropology.
- Created and led Spanish Speaking courses for parents of minority and underprivileged students.
- Worked with multiple departments to workshop a board-game that is a variation of ticket-to-ride but set in Cuba. Acted as a game design specialist and educator for students that participated in the project.

Barnard College: Science and Technology Entry Program   **2010 - 2020**
Instructor - High School   *New York, NY*
- Instructor for Computer Science, Math, and Physics for High School students.
- Designed, pitched, and led Game Design and Tech Awareness courses.

Coder Dojo: Girls First Program   **May 2016 - 2017**
Instructor   *New York, NY*
- Led weekend courses in Unity and Blender for girls aged 12-17.

PROJECTS

Full-Stack Web Application - WTA!   **2023**

- Developed a full-stack web app simulating a guessing game using React, Flask, and Python for Giant Machines.
- Implemented account creation, leaderboard, and data storage using local storage and querying.
- Originally designed as a python app, I utilized Flask to service the game logic as api calls to React to make the app run on the browser.
- The app serves as not only a fully functional game, but also an educational tool to show off mobile first web development principles and tools.

SKILLS & INTERESTS

- **Skills:** Javascript, Typescript, HTML & CSS, MongoDB, Docker, Python, Flask, Java, C#
- **Soft Skills:** Public Speaking, Adaptability, Collaboration, Communication, Troubleshooting
- **Interests:** Graphic Design, Game Design, Astrophysics, Science Fiction
- **Languages:** English, Spanish