

# Doug Rudolph

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## EDUCATION

### RUTGERS UNIVERSITY

BA IN COMPUTER SCIENCE

CONC. IN COMPUTER GRAPHICS

COLLEGE OF ARTS AND SCIENCES

Expected Graduation: May 2017

Location: New Brunswick, NJ

## LINKS

LinkedIn: /in/DougJRudolph

Github: [github.com/11](https://github.com/11)

## COURSEWORK

Computer Graphics

(Research Asst.)

Data Structures

Programming Principles

Software Engineering

Data Analytics

Linear Algebra

Databases

Algorithmic Design

Game Development

Unix Tools and Scripting

## SKILLS

### LANGUAGES

Over 5000 lines:

Java • C# • Python • C++

C • ASP.net • JavaScript

Over 1000 lines:

CSS •  $\text{\LaTeX}$  • Assembly

MySQL • PHP • Clojure

### FRAMEWORKS & TOOLS

LINQ • Git • Terminal

Flask • Vue.js • JQuery

OpenGL • GLSL • Monogame

LibGDX • XNA • Bootstrap

## INVOLVEMENT

### CLUB & POSITION

USACS • Web Master

USACS • Community CS Mentor

HackRU • Hacker Experience Director

HackRU • Hackathon Judge

RU Tech Meet UP • Event Organizer

## EXPERIENCE & LEADERSHIP

### RECCCELERATOR | SOFTWARE ENGINEER & CO FOUNDER

July 2014 – Now | Washington DC, MD & Sparta, NJ

- Wrote a web payment portal using C#, ASP.net, and the Stripe payment API to track and store credit card transactions in a Microsoft SQL Database
- Developed an in house data-analytics API with the C# LINQ framework to pull statistics from credit card transactions to seek out spending patterns

### RUTGERS UNIVERSITY | GRAPHICS RESEARCHER

May 2016 – Now | Piscataway, NJ

- Working underneath Ph.D Dr. Bahman Kalantari as lead software engineer for his polynomiography algorithmic art visualization research
- Responsible for maintaing the project code base and writing shaders in GLSL, OpenGL, and Java for Dr. Kalantari's algorithm to the Convex Hull problem

### RUTGERS UNIVERSITY | RECITATION LEADER & CODE RED TUTOR

Sep 2016 – Now | Piscataway, NJ

- Organize and conduct weekly recitations for introductory computer science courses to solidify concepts that are taught during formal lectures
- University CS tutor for Introduction to CS & Data Structures

### RUTGERS COGS | PRESIDENT - CREATION OF GAME SOCIETY

Sep 2016 – Now | Piscataway, NJ

- Creating a strong Rutgers CS community and managing \$20,000 to create informative and educational events for Rutgers computer scientists
- Coordinating with the university and running a university-wide game jam
- Guided mentors for 1000 developers at the Rutgers biannual hackathon

## PROJECTS

### GG-ENGINE | 2D PLATFORMER GAME ENGINE

[www.github.com/11/GGEngine](https://www.github.com/11/GGEngine)

- Developed a scalable 2D game engine using LibGDX, Box2D, and Box2D-lights that allows developers to create, design, and publish platforming games
- Engineered custom tile-mapping library that utilizes Tiled's map editing software with Java to parse orthoganal and isometric tile-maps into a level

### DYNAMO | DYNAMIC AGENDA

[www.github.com/11/Dynamo](https://www.github.com/11/Dynamo)

- Chrome extension designed to be used as a dynamically updating agenda that suggests the order responsibilities should be completed
- Determines the order based on due date and previously finished, related tasks
- Designed the front-end using HTML, wrote a custom CSS library, and authored the data prioritization and local hosting components with pure JavaScript
- Won 'Most self-reliant hack' at HackNY Fall 2016

### EDUSCAPE | GAMIFYING EDUCATION

[www.github.com/11/Eduscape](https://www.github.com/11/Eduscape)

- Educational web-app built to work with the Canvas API to allow students to anonymously wager credits and duel to compete for classroom high scores
- Wrote scalabale database model using MySQL and integrated it with Node.js
- EduScape won Microsf't 'Honorable mention prize' at HackPSU Spring 2015