# **Kenneth Diogo**

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#### **EDUCATION**

## Youngstown State University (YSU)

- Bachelor of Science, Computer Science, Anticipated May 2020
- Honors/Scholarships: YSU President's Scholarship, Honors Program Scholarship, Trailblazer Scholarship
- Overall GPA: 3.7

#### PROJECTS/RESEARCH

#### Waru, Game Programming (Fall 2019)

• Developed a 2D parkour-based side-scroller in Unity. Involved the implementation of UI elements, patrol-based AI, animations, level design, and combat system.

### Tutor Assistance Center (TAC) (Independent Work in Progress)

• Developing a SPA Web Service using Node.js, TypeScript, Type ORM, and Vue.js to meet the Administrative and real-time needs of Youngstown State University's Math Assistance Center (MAC)

## Lexical Analyzer Generator, Compiler Design (Spring 2019)

• Wrote a Lexical Analyzer Generator in C++ that generated DFAs from regex definitions using Thompson's Construction algorithm and subset construction.

### Machine Learning and Genetic Algorithms with Flappy Bird, AI in Game Design (Spring 2018)

• Trained a three-layer dense neural network using genetic algorithms to play Flappy Bird.

#### Consortium for Mathematics and Its Applications Contest 2018 (Spring 2018)

• Collaborated with a group of three students to develop a mathematical model and simulation of flow of languages across the globe. Simulation was implemented with Python and modelled as a directed graph

### Consortium for Mathematics and Its Applications Contest 2017 (Spring 2017)

• Collaborated with a group of three students to develop a mathematical model and simulation of toll booth throughput efficiency. Simulation was implemented in Python and modelled as a series of queues to demonstrate the effects of changing a variety of variables. Was awarded top 50% of 5000 international teams.

#### LEADERSHIP/INVOLVEMENT

# **YSU Honors College**

• Rigorous coursework and community service.

**YSU Penguin Hackers** (Fall 2016 – present)

YSU Men's Volleyball Club – President (Fall 2017 – present)

#### TECHNICAL SKILLS

# Programming Languages/Skills

• Python, C#, VB, Java, JavaScript/TypeScript, SQL, GraphQL, C/C++, JQuery, HTML/CSS, ASP.NET, Django, Vue.js, React.js, Node.js, RESTful APIs, Spring Framework, Agile, Android, Electron, WPF

### WORK EXPERIENCE

#### Research Assistant, Youngstown State University

September 2019 – Present

- Collaborating with Electrical Engineering department to develop to an Android, IOS, and web application to interface with a Bluetooth Low Energy device to collect pressure sensor readings.
- Front-end work with Vue.js. RESTful API development with Django.
- Desktop application development using Electron and Vue.js

#### **Software Engineer Intern,** J.P. Morgan Chase & Co.

June 2019 – August 2019

- Full-Stack development creating a web application to help accountants asses foreign exchange risk
- RESTful API development using Java w/Spring Framework and Oracle Database
- Collaborated with end-users to create an intuitive Front-end experience using React.js and Bootstrap 4

# **Software Developer,** Intellitech Corporation

March 2018 – April 2019

- Develop/maintain current and legacy public safety software built in VB6, C#.NET, VB.Net, and ASP.Net
- Full-Stack Web Development for a new, web-based JMS (Jail Management System) built with ASP.NET MVC and Vue.js
- Created a graphical interface for managing user group permissions in legacy VBA application
- Designed and developed a C#.NET Windows Presentation Foundation application that allow a user to easily format and create data interfaces/exports to satisfy the needs of several clients across the U.S.A

Teacher, Success After 6 Youngstown Schools, Youngstown, OH

January 2017 – May 2019

• Teach the fundamentals of computer hardware/software to 4<sup>th</sup> – 5<sup>th</sup> grade students

#### Computer Science Tutor, YSU Center for Student Progress, Youngstown, OH

January 2017 - Present

• Teach Programming, Data Structures, and Object-Oriented Programming in C++, Java, JavaScript, and Python.