


# Nikolaos Kalampalikis

nkalampalikis@wpi.edu | 603.858.6745

## LINKS

-  nkalampalikis.com
-  github.com/nkalampalikis
-  linkedin.com/in/nkalampalikis

## SKILLS

### </> LANGUAGES

Python, C, C++, Java, SQL, Go.

### ☁ WEBWARE

HTML, CSS, Typescript, AWS, REST API.

### 📊 DATA SCIENCE

Numpy, Scipy, Pandas, Matplotlib, Keras, Tensorflow, R.

### 🔧 TOOLS & FRAMEWORKS

Git, Linux Shell, Docker, Bazel, Robot, Unit Testing.

### 🏗 DESIGN

Agile Methodologies, Waterfall, Object Oriented Design Patterns, Test Driven Development.

## COURSEWORK

### 🏛 GRADUATE

Algorithms & Data Structures  
Discrete Mathematics  
Theory of Computation  
Artificial Intelligence  
Statistical Learning  
Numerical Methods  
Linear Algebra

### 🏛 UNDERGRADUATE

Object Oriented Design  
Database Systems  
Software Engineering  
Computer Networks  
Operating Systems

## EDUCATION

### MASTER OF SCIENCE IN APPLIED MATHEMATICS

WORCESTER POLYTECHNIC INSTITUTE | DECEMBER 2021 | GPA: 3.4

- Graduate Assistantship.

### BACHELOR OF SCIENCE IN COMPUTER SCIENCE

WORCESTER POLYTECHNIC INSTITUTE | MAY 2019 | GPA: 3.3

- \$40K+ in scholarship awards, Dean's List.
- National Hellenic Student Association (NHS), WPI Ski Team.

## EXPERIENCE

### TEACHING ASSISTANT | WORCESTER POLYTECHNIC INSTITUTE

Sep 2019 – Present | Worcester, MA

- Responsible for putting on conferences to full-size classes as well as assisting students in tutoring sessions and office hours.
- Assisted in the teaching of courses such as Linear Algebra, and Calculus.

### SOFTWARE ENGINEERING INTERN | 128 TECHNOLOGY

May 2020 – Aug 2020 | Burlington, MA

- Worked in the Systems Team for the 128T router. The Systems Team is responsible for all the core functionality of the router as well as the utilities that interact with it.
- Personally responsible for developing the save-tech-support command line tool which saves all the debugging logs of the router. The main script of the command was developed in Python and Go, and the integration testing was in Robot.

### SOFTWARE ENGINEERING INTERN | PIVOTAL SOFTWARE INC.

Jun 2019 – Aug 2019 | Palo Alto, CA

- Worked in the Cluster Management (CM) team for the GreenPlum database product. The CM team is responsible for all the CLI utilities that interact with the database, while it operated with 2-week sprints, and daily scrums.
- Personally responsible for fixing several issues and running test pipelines on the cluster utilities, as well as developing the new upgrade utility.

## PROJECTS

### AUTHENTICATION FOR WEARABLE DEVICES | UNDERGRADUATE THESIS

May 2018 – April 2019  

- Worked within a team of 4 to develop a model for wearable devices that uses physiological data in order to perform user authentication. The model was a Convolutional Neural Network optimized by a Genetic Algorithm.
- Analyzed metrics of the model and compared accuracy results between the two main physiological signals used.

### URBAN PLANNING | CLASS PROJECT

January 2018 – February 2018 

- Worked in a team of 3 people, to develop a C++ application that given a map of a city and the type of buildings, it optimizes the layout based on different given conditions. A Genetic Algorithm was used to optimize the model.
- Performed random experiments using Matlab, in order to statistically test the performance of each optimization method.

### HOSPITAL GUIDE APPLICATION | CLASS PROJECT

October 2017 – December 2017 

- Worked in a team of 11 to develop a guide application for Brigham Women's Main Hospital. It was a complete Java application with a GUI in FXML. The application included features such as pathfinding and service requests.
- As the Assistant Lead Developer, I was responsible for the map building and pathfinding algorithms, as well as the search engine for the destination selection.