

# Francesco G. Pecora

Computer Science student interested in a position  
as Software Engineering Intern

CUNY, College of Staten Island

Major: Computer Science

Graduation: May 2021

GPA: 3.34

LinkedIn

18 Benedict Road, Staten Island, New York, 10304

Date of Birth: 08/07/1998

GitHub

francescogpecora@gmail.com

+1 (646) 509-9791

## ABOUT ME:

---

**Programming Languages:** C++, Python, JavaScript (ES6/7/8/9), HTML5, CSS3, MATLAB  
**Frameworks:** React.js, Node.js, Express.js, PostgreSQL, MySQL, Git, Keras, OpenCV  
**Interests:** Software Engineering, Computer Vision  
**Languages:** English, Italian

## WORK AND SCHOOL EXPERIENCES:

---

### Web Developer

Bionova Lab 2019 - Present bn-science.com info@bionovalab.com

- Co-developed an e-commerce website with Shopify to sell a high-end skincare collection retailed by Macy's and Dermstore to an audience of 20,000+ clients.
- Optimized the website experience by improving the overall time-to-interact by 73% reducing image sizes, minifying and combining files, and optimizing the CSS delivery.
- Assured on-time delivery of content respecting the deadlines imposed by my manager, Macy's, and Dermstore.

### Research Student

CUNY Research Scholars Program 2017 - Present aleksandar.haber@csi.cuny.edu

- Received a scholarship of \$10,000 to work in the mechatronics laboratory under the supervision of Prof. Dr. Aleksandar Haber with the purpose of developing different projects in the fields of robotics, control theory, and machine learning.

PUBLICATION: Got accepted in the international 2019 COMSOL conference to present the paper describing a system that is able to estimate and predict large-scale elastic structures through machine learning.

PUBLICATION: Got accepted in the international 2019 ASME conference to present the paper describing a machine learning model able to identify and predict temperature dynamics using RNNs.

## PROJECTS:

---

### Find Face App

GitHub — Website

Personal Project

- Full-stack development of an application that allows users to register and use a machine learning API to detect faces in their pictures.
- Implemented the front-end with *React.js* and other packages like *tachyons* to obtain a fully responsive application.
- Developed the back-end with *Node.js* + *Express.js* to create a 4 end-points server.
- Created a database using *PostgreSQL* with secure storage of users passwords in the form of *hashes*.

### Identification of Temperature Dynamics Through Machine Learning

Link

CUNY Research Scholars Program Project

- Built an experimental setup which allowed us to keep track of the behavior of the temperature through a bar.
- Programmed the control board in *C++* to control the input voltages to reproduce the required temperatures.
- Implemented a Recurrent Neural Network using *Python* and *Keras* to identify and predict the temperature dynamics of the system only witnessing 1.2% of errors.

### Object Tracking

GitHub

Personal Project

- Programmed an object tracking system using *Python* and *OpenCV*. The camera was able to track the objects of the specified color on live video despite of its noisy resolution.

## MEMBERSHIPS AND PRESENTATIONS:

---

### The National Society of Collegiate Scholars

Become member of the NSCS society as recognition of being part of the top 20% of the students based on class performance.

### 2018-2019 CUNY Undergraduate Research Conference

Participated for two years in a row at the CUNY Undergraduate Research Conference to presents mechatronics projects to audiences of 100+ people.