# Nikola Janjušević

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## EDUCATION

**New York University, Tandon School of Engineering**, Brooklyn, NY

Ph.D Candidate in Electrical and Computer Engineering — Projected May 2024
Advisor: Professor Yao Wang, NYU Video Lab, NYU Wireless Lab
*K-12 STEM Fellowship* — 2019
*Telephonics Corporation Research Fellowship* — 2020

**The Cooper Union for the Advancement of Science and Art**, New York, NY

Bachelor of Engineering, Electrical Engineering, Magna Cum Laude — 2015 - 2019
Minor in Computer Science
*Half-Tuition Scholarship, Innovator's Merit Scholarship* — 2015 - 2019
*Radio Club of America Scholarship Award* — 2019

## RESEARCH EXPERIENCE

**R3Cap**, *The Cooper Union* — Fall 2018 - Spring 2019

- 3D Non-Line-of-Sight Motion Capture of RFID tags with antenna beamforming
- Designed implementation of DSP chain on FPGA with group members
- Prototyped custom RF-Frontend on a mixed-signal PCB

**Graph Representation of Fonts for Deep Learning**, *The Cooper Union* — Fall 2018

- Explored strategies for glyph classification with Deep Learning
- Developed novel technique of glyph representation by graph adjacency matrices
- Improved glyph classification accuracy over raster representation

## WORK EXPERIENCE

**Senior Instructor and Curriculum Designer** — Summer 2019
*NYU Tandon Summer STEM Program*

- Led design of two-week introductory machine-learning course for HS students
- Guided students from Linear Algebra to successful projects in Artificial Neural Networks
- Lecture material and assignments available at `https://github.com/nikopj/SummerML`

**Junior Application Engineer** — Summer 2018
*Mini-Circuits, Brooklyn, NY*

- Developed curricula for the UVNA-63 programmable vector network analyzer
- Authored and co-authored application-notes on "Error Correction" and "Calibration Standards"
- Designed educational lab experiments to supplement application-notes

**Teaching Assistant** — Summer 2016, 2017
*The Cooper Union Summer STEM Program*

- Led six-week digital logic design course of 35 High School students
- Lectured on digital logic and engineering design principles
- Supervised student's work and mentored group projects

## SKILLS

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|---|---|
| **Languages** | English (Native), Mandarin (Full Working Proficiency), Serbian (Intermediate) |
| **Computer Languages** | `C`, `C++`, `Python` |
| **Software & Tools** | MATLAB, LaTeX, PyTorch, TensorFlow |