# Michael Chunko

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⑥ MikeChunko

## Education

#### Bachelors of Science in Computer Science, Minor in Mathematics

Aug 2018 – May 2021

Stevens Institute of Technology, Hoboken, NJ

GPA - 3.97

• Teaching Assistant: Automata and Computation, Algorithmic Complexity, Compiler Design

• Selected Courses: Compiler Design, Machine Learning, Computer Vision, Deep Learning, Web Programming, Operating Systems, Database Management

### Skills

Programming: C, C++, Python, Java, OCaml, Scheme Web: JavaScript, PugJS, HTML5, CSS

Misc. Tech: UNIX, Git, Linux, Windows, MATLAB, GNU Octave, LATEX, MS Excel

# Experience

#### Systems Software Engineer, Kulicke and Soffa Industries, Inc. Fort Washington, PA

Jun 2021 - Current

- Designed C and C++ real-time, embedded systems for semiconductor packaging machines
- Collaborated with electrical and process engineers, both domestically and internationally, while maintaining deadlines
- Worked in an agile environment with a focus on test-driven development

#### Teaching Assistant, Stevens Institute of Technology Hoboken, NJ

Dec 2019 - May 2021

- Assistant for Automata and Computation (undergraduate level), Algorithmic Complexity (graduate level), Compiler Design (graduate level)
- Created new assignments for students to nurture an understanding of the material
- Assisted students in gaining an understanding for the topics taught in class both in one—on—one sessions and in groups of up to ten students

#### LATEX Typesetter, Stevens Institute of Technology, Hoboken, NJ

Oct 2018 - July 2020

- Created documents written in LATEX and wrote .TeX code
- Provided IT assistance

# **Projects**

#### TaylorFit-RSA, Simetrica, LLC Metuchen, NJ

taylorfit-rsa.com Aug 2020 – May 2021

- Maintained a website used for data prediction and modeling written in a combination of Stylus, Coffeescript, Pug, and Knockout
- Worked with a team to provide thorough documentation, fix vulnerabilities and bugs, and improve the user experience
- Created new functionalities based on user requests including better predictive functionalities and automatic model fitting

#### **OAT Compiler**, Stevens Institute of Technology *Hoboken*, *NJ*

Jan 2020 - May 2020

- Designed a fully fledged compiler, parser, and lexer for OAT (a C-like language)
- Capable of lexing and parsing raw OAT code, compiling from OAT to LLVM, compiling from LLVM to X86, and simulating X86
- Optimized the output between each step, reducing code size and improving efficiency

## RayTrace, Personal Howell, NJ

Jul 2020 - Aug 2020

- Designed and programmed a software-based implementation of the ray tracing rendering technique
- Capable of accurately simulating perspective, reflections, refractions, shadows, and other optical effects

#### Snake DQN, Personal Howell, NJ

May 2020 – Jun 2020

- Used Keras to create a Deep Q-Network to learn and play the classic game of Snake while achieving a high score
- Programmed an implementation of Snake in pygame

#### Language Detection, Personal Howell, NJ

Mar 2018 - Jun 2018

- Designed and programmed a neural network capable of identifying the language of a given word with high accuracy
- Developed working knowledge of the TensorFlow library for creating neural networks