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michael-chunko
MikeChunko

Michael Chunko

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 Completed Courses**: Compiler Design, Machine Learning, Computer Vision, Algorithms, Data Structures, Compiler Design, Systems Programming, Database Management
- **Selected In–Progress Courses**: Deep Learning, Web Programming, Operating Systems

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 in test–driven development

Teaching Assistant, Stevens Institute of Technology *Hoboken, NJ* Dec 2019 – Current

- 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