Benjamin Michalowicz

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EDUCATION

STONY BROOK UNIVERSITY
B.S, COMPUTER SCIENCE
May 2020 | Stony Brook, NY

Clubs/Orgs:
Marching Band
Stony Brook Computing Society
TKD at SBU
Stony Brook Live

M.S, COMPUTER SCIENCE
(Exp.) May 2021 | Stony Brook, NY

COURSEWORK

UNDERGRADUATE
Computer Science I, II, III
Systems Fundamentals I, II
Calculus I, II, III
Operating Systems
Technical Communications
Analysis of Algorithms
Principles of Programming Languages
Principles of Database Systems
Advanced Sys. Prog. in UNIX/C
Software Engineering

GRADUATE
Data Science Fundamentals
Principles of Programming Languages
System Security
Quantum Computing/Applications
Computer Networks

SKILLS

PROGRAMMING
Java • C • Python • Shell Scripting
•Qiskit • Fortran • C++
• SQL • HTML
• CSS • Javascript • LaTeX
• MIPS Assembly

OPERATING SYSTEMS
Windows • *-nix • OS X

TECHNOLOGIES
MySQL • Node.js • NumPy •
SciKit-Learn • Seaborn/data
visualization • Git • SQL Server •
Intel Pin • LLVM, Cray, GNU Compilers

PERCUSSION
•2007-Present
• Marching, Orchestral, Drum Set
• Leadership in Marching Band
(2015-Present)
• Various Music Awards
(2012-Present)

WORK EXPERIENCE

STONY BROOK UNIVERSITY | RESEARCH ASSISTANT
August 2020-Present | Stony Brook, New York
- High-Performance Computing research in Dr. Barbara Chapman's Exasca||ab, focusing on testing and benchmarking new HPC clusters and architecture. Ran acceptance tests and helped debug the configuration of the new Ookami cluster

STONY BROOK UNIVERSITY | TEACHING ASSISTANT
Aug 2020 - Dec 2020 | Stony Brook, New York
- Held weekly office hours, led weekly recitations, and helped students understand material in Stony Brook University's CSE 216 course (Programming Abstractions). Designed recitation questions and collaborated with the course lecturer.

SBUHACKS PLANNING COMMITTEE | SOCIAL MEDIA MANAGER
March 2020-Dec 2020 | Stony Brook, New York
- Keeping social media accounts up to date (Instagram, Twitter, Facebook, etc.) and otherwise helping organize the SBUHacks hackathon for the 2020 MLH season; helped run Stony Brook's first-ever virtual hackathon

STONY BROOK UNIVERSITY | UNDERGRADUATE RESEARCH ASSISTANT
May 2018 - May 2019, Dec 2019-Feb 2020 | Stony Brook, New York
- Worked with PhD students in the COMPAS lab on projects focusing on microarchitecture and cloud infrastructure.

BAE SYSTEMS | SOFTWARE TECHNICAL INTERN
May 2019 - Aug 2019 | Totowa, New Jersey
- Aided in design and implementation of software projects using Agile techniques specializing in defense systems; utilizing both Windows and Linux environments.

PROJECTS

CHOR-DNS | COURSE PROJECT | CO-DEVELOPER
October-December 2020 | Stony Brook, NY
- Course project in team of four: studied the Chord ring structure for DNS queries and comparing its performance to the traditional DNS hierarchy. Ran unit/integration tests on a DistAlgo setup, configuration files for launching.

TOPOLOGIC | LIBRARY TO SIMULATE DFAS | CO-DEVELOPER
June-August 2020
- Simulates DFAs and Probabilistic DFA's using context switching. Programs can start at multiple vertices, which may be run in parallel.

MODIFICATIONS TO XV6 | COURSE/PERSONAL PROJECT
September-December 2019 | Stony Brook, NY
- Modified the xv6 OS to understand OS concepts and for personal curiosity; mouse driver, CPU scheduling, file systems, and signaling/process management

GERRYMENDER | CAPSTONE PROJECT, DB DESIGN, DATA MANAGEMENT
September-December 2019 | Stony Brook, NY
- Capstone Project for CS major aimed to fix political Gerrymandering; designed databases using My/SQL; data pre-processing and maintenance through Python

HONORS/AWARDS

INTERNATIONAL SYMPOSIUM ON COMPUTER ARCHITECTURE
Phoenix, AZ, 2019
- ISCA uArch Workshop attendee on awarded scholarship