

Timothy Machnacki

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Education

University of Michigan

Bachelor of Science in Computer Science

Ann Arbor, MI

Sept. 2018-April 2022

- **GPA:** 3.45/4.0
- **Featured Coursework:** Data Structures & Algorithms, Mobile App Development for Entrepreneurs, Game Development, Web Systems, User Interface Development, Information Retrieval, Software Engineering

Relevant Experience

EECS 481: Software Engineering

Jan. 2022-April 2022

- Contributed to an open-source repository, created high-coverage test suites (manual & automated), used mutation testing and static analysis tools, and implemented delta-debugging to gain relevant experience.
- Covered topics including measurement and risk, quality assurance, software defects, software design, and productivity at scale to gain insight into industry standards and best practices

Nexsys Technologies

Intern • Software Quality Engineer

Detroit, MI

June 2020-Aug. 2021

- Implemented new and modern technologies for ClearSign legacy systems to improve code maintainability and future usability
- Used performance analysis metrics and tools to improve test suites
- Shadowed various team members to learn different levels of an enterprise-scale tech stack
- Attended weekly "learn to code" sessions, delving into code base
- Worked with C# .NET in an Agile environment, participating in Scrum stand ups and sprints

AVL Powertrain Engineering

Intern • Advanced Simulations Technology • Software Sales Engineering Team

Plymouth, MI

June 2019-Aug. 2019

- Projects included a five-year software sales analysis, report, and presentation; University Partnership Program SWOT analysis; and a marketing ROI data analysis
- Shadowed during code inspection and code reviews

Music Production

MacNasty Beats

Lake Orion, MI

Sept. 2016-Sept. 2019

- Manage website and YouTube channel; lease tracks to artists; and produce, mix, and master tracks
- Currently rebranding and launching new website

Achievements

University of Michigan Men's Club Lacrosse Captain

Oct. 2020 - April 2022

- Coordinated team practices and events on and off the field

J.P. Morgan Chase EECS 183 Computer Science Showcase Winner

Apr 2019

- Led a team of 4 in developing and presenting an arduino mini-golf arcade game
- Awarded to our project based on its complexity and ingenuity

Skills

- **Languages:** Python, C++, C#, Javascript, HTML, CSS
- **Frameworks & Libraries:** Bootstrap, TailwindCSS, MDB, vuetify, React.js, Express.js, Node.js, Next.js, Flask, Django, Jinja2, GraphQL, SQL, sqlite3, MongoDB, Mongoose.js
- Experience with npm, webpack, pip, heroku, ec2, Unity Engine, Git, JIRA, InDesign, Photoshop, FL Studio