

James T. Danielson

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Working Remotely from Michigan

Work History

Nextira	Software Engineer	Michigan (Remote)	Nov 2021 – Present
<ul style="list-style-type: none">◆ Small software consultancy, working with a variety of major corporations, such as Meta and Epic Games, primarily to stand up and manage cloud based workstations to improve work-from-home experience and standardize the workstation experience.◆ Provided a leading role with a client, lead weekly client syncs. Gathered information and requests from client, created Jira tickets and distributed tasks to meet client needs.◆ Worked to design, deploy, and manage render farms to the cloud for processing major artistic projects.◆ Helped design and deploy various solutions, such as custom AWS Lambdas (Python & Go), to problems that would arise and provided customization of modules to meet business needs.◆ Designed and implemented various components (Typescript, React) as well as back-end logic (Python, Go, PHP)			
NIKSUN	Software Engineer	Michigan (Remote)	Aug 2020 – Nov 2021
<ul style="list-style-type: none">◆ Designed and developed several different prototypes (Python) for high availability, data integrity/security analysis tools for a variety of systems: *BSD, Linux, Windows with one project requiring cross-platform support.◆ Implemented a Linux data center feature into an old enterprise edition of Windows with Python and scapy◆ Work with and had root access to many Linux and *BSD servers on a daily basis, fix odd issues, check logs, etc.◆ Helped train and hire new team members for further product development beyond proof of concept.			
Pine River Mines LLC	Technology Partner & Founder	Michigan (Remote)	Nov 2017 – Dec 2020
<ul style="list-style-type: none">◆ Founded and ran a small family-owned cryptocurrency mining company, primarily mined with ASICs (Bitcoin, Litecoin, etc) and also mined with some GPU (Primarily ETH)◆ Built a miniature data center from an old hunting shack, upgraded electrical and network capability.◆ Developed a custom multithreaded system using Python, PyQt, C, and Arduinos for managing and monitoring temperature, humidity, and all the mining equipment. Individual miners and sensors feed data into a centralized Raspberry Pi on-site, which can then be remotely connected to for management.◆ Management tools included automated switching of ASIC coin mined (Bitcoin, Bitcoin Cash, Peercoin, etc) depending on max profitability.			
Microsoft	Software Development Engineer	Redmond, WA	Feb 2016 – Oct 2017
<ul style="list-style-type: none">◆ Worked in the operating systems group (OSG) security active defense team doing a combination of research on vulnerabilities and developing systems to mitigate them.◆ Worked on a new tool called ProcessMitigations, written in C++ (Windows API), for managing security settings on Windows 10 Enterprise from Powershell.◆ Link: https://www.powershellgallery.com/packages/ProcessMitigations/1.0.7			
Microsoft	Software Development Engineer Intern	Redmond, WA	May 2014 – Aug 2014 & May 2013 – Aug 2013
<ul style="list-style-type: none">◆ Developed a static variable tracking tool in C++ for security code reviews on the Windows code base◆ Worked on application frameworks for Windows Phone. Work consisted of implementing features in C++ to expose functionality in Visual Studio for other developers to use.			

Work History Continued

University of Michigan	Research Assistant	Ann Arbor, MI	Sept 2013 – April 2014
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- ◆ Did odd tasks and research with the network and security research group (NSRG) on Python based software binary analysis in an attempt to protect computers from malware.
- ◆ Work ranged from debugging malware to working on analysis and disassembly scripts
- ◆ Worked on both Windows and Linux systems..

University of Michigan	Tutor/IA for EECS 101	Ann Arbor, MI	Sept 2012 – Dec 2012
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- ◆ Helped to write and teach the labs for EECS 101, a new class at the University of Michigan.
- ◆ Taught students simple app design using MIT App Inventor.
- ◆ Held office hours for the students to help with homework and to try to interest the students in Computer Science.

J.P. Morgan	Application Developer Intern	New York City	June 2012 – Aug 2012
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- ◆ Worked in Treasury & Securities Services on a web based application (Java, Spring Framework) for entitlement management.
- ◆ Redesigned parts of the frontend to be cross-browser compatible (HTML, Javascript).
- ◆ Participated in corporate hack-a-thon. Worked with Linux & Python (Django back-end) for prototype.

Education

University of Michigan, College of Engineering, Ann Arbor, MI – Graduation: December 2015

Bachelor's of Engineering, Computer Science Major, Music Minor. - G.P.A. – 3.502

JiaoTong University (上海交通大学), Study Abroad, Shanghai, China – May 2015 – August 2015

Skills

- ◆ **Programming Languages:**
 - Python, C++/C, C#, Rust, Shell, Go, Java, HTML, Javascript/Typescript
 - Django, Node.js, Next.js, React
- ◆ **Human Languages:**
 - English (Native), Chinese (basic proficiency), Spanish (basic proficiency)
- ◆ **Tools:**
 - AWS, Git, sqlite, MySQL, Visual Studio, winDbg, gdb

Experience with Linux, *BSD, and Windows systems as well as building software & packaging for them as well.

Other

- Been following the crypto space since 2012, started doing some Dogecoin mining back in university (2014) to learn more about cryptocurrency. Around the same time, wrote a simple prototype CLI trading app for buying & selling on some old bitcoin exchanges. Then wrote a simple bot to try to exploit arbitrage opportunities between altcoins & bitcoin; abandoned the idea after realizing the tax responsibility it incurred and minimal profits produced.
- I used to (~2008-2012) run a website (PHP, HTML, Javascript) and an IRC network (3 Linux servers: Michigan, California, & London) for a Legend of Zelda game hacking community back in highschool.

Accolades

Boy Scouts of America, Eagle Scout – December 2010

- ◆ Raised money for materials and led a group of Boy Scouts to build raised beds for a local wildlife sanctuary.