James T. Danielson

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Working Remotely from Michigan

Work History

Six Nines IT	Software Engineer	Michigan (Remote)	Nov 2021 – Present

- Small software consultancy, working with a variety of major corporations 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), to problems that would arise and provided customization of modules to meet business needs.

NIKSUN	Software Engineer	Michigan (Remote)	Aug 2020 – Nov 2021

- 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

- 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

- 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

- 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

- 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

- 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

- 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#, Shell, Java, HTML, Javascript
- **Human Languages**:
  - English (Native), Chinese (basic proficiency), Spanish (basic proficiency)
- **Tools**:
  - 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.