# **Alexander Treil**

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#### **Education**

• **Brown University** *Sc.B. in Computer Science* 

September, 2012 - May, 2016

#### **Current Work**

• Microsoft

SDE Level 60

SDE Level 59

August, 2016 - Present September, 2017 - Present August, 2016 - August, 2017

- Team member of the Azure Compromise and Investigation Services, responsible for maintaining and developing a
  data pipeline that analyzes hundreds of thousands of VHDs to look for evidence of compromise
- Contributed to the development of an internal web API to expose access to the data we collect:
  - \* Set up authentication, authorization, and RBAC to limit access to specific users by leveraging Azure Active Directory and ASP .NET
  - \* Increased the percent of Azure IaaS VMs supported by the web API from less than 50% to 100% by reimplementing some of the core logic in the back end
  - \* Designed a framework that helped other developers with implementing our business logic for the web API
  - \* Implemented parts of the core business logic by leveraging the Azure REST APIs
- Increased the detection of malicious files by working with a separate internal team to integrate their file analysis web service with our pipeline
- Fixed bugs, and implemented optimizations, through the course of identifying issues through on-call incidents
- Improved the runtime of several ad-hoc investigation tools by up to 70% by modifying an existing third-party ad-hoc tool to interface with Azure VHDs
- Improved the scheduling service to allow the reuse of existing tasks in a single pipeline, such as copying and loading data into external data stores
- Mentored an intern through a successful project

### **Previous Work Experience**

#### • Data Software Storage Intern at HP

May - August, 2015

- Improved the internal development cycle for the team by improving the testing framework, by adding automated
  tests during build time, by integrating static code analysis tools, and by re-factoring old code from Scala into Java to
  align with the rest of the code base
- TA for CS 33 (Systems Programming) and CS 32 (Software Engineering)

Fall, 2014 - Spring, 2015

 Held weekly office hours and lab sections, modified existing projects to help with new concepts, and graded and gave feedback on projects/assignments

## Leadership Experience

• Intern Mentor May - August, 2017

- Worked with my manager to come up with the requirements for a visualization tool that could help spot changes in an OS between different snapshots of the same OS. The project was successful and we used it in several investigations
- I tried to make his internship fun and productive. As a result, I was able to convince him to accept a return offer for a full-time position

### Technology and programming languages

Proficient: C#, Powershell, Azure

Familiar: C, Java, Python

#### Interests and hobbies

Skiing, hiking, swimming Arduino and microcontrollers

Was a member of the varsity swim team during my time in high school and university