

THOMAS BIDNE

Software Engineer

@ tbidne@gmail.com

https://tbidne.github.io

in tbidne

tbidne

ABOUT

I am a software engineer with 10 years of professional experience. I have been writing code since I was 14, for both academic and personal reasons. I write code most days, whether it is paid work, open-source contributions, or just plain experimentation for fun.

EXPERIENCE

Senior Software Engineer

Platonic.Systems

November 2020 – Present

- Implemented "smart-contracts" with a high emphasis on correctness in Haskell and Nix.
- Designed and implemented a website for data visualization and machine learning in Python.
- Improved a client's software's robustness by re-implementing fragile JavaScript APIs in Haskell.
- Worked on a high-performance full-stack Haskell web application for supply-chain analysis.

Senior DevSecOps Engineer

BridgePhase

March 2016 – November 2020 USCIS, Washington D.C.

- Full-stack web development for the Electronic Immigration System (ELIS) application, used by United States Citizenship and Immigration (USCIS) officers for handling applicant case flows.
- Technologies used included Java+Spring, Angular, React, Javascript, Typescript, Oracle/Postgres, Docker, OpenShift, and CI/CD via Jenkins.
- Maintained a Red Hat Enterprise Linux virtual machine for testing.
- Participated in multiple "tiger teams" for developing cross-team solutions to shared problems.
- Managed daily production deployments on a semi-regular basis.

Software Engineer

GBL Systems

May 2013 – February 2016 NAS Pax River, Patuxent MD

- Worked on the C++ real-time distributed simulation Next Generation Threat System (NGTS) for the United States Navy.
- Worked on network protocols and integrating NGTS with third-party software. This included designing/implementing APIs and travelling to customer sites to provide support.

EDUCATION

B.Sc. in Computer Science

University of Maryland, College Park

2009 – 2013

- Minor: Astronomy
- College Park Scholars Graduate

OPEN SOURCE

- I have contributed to opensource via my own applications / libraries and other popular libraries, especially in the Haskell community. This includes GHC, the primary Haskell compiler.
- More information can be found on my github and website.

SKILLS

Distributed Systems

Networking

Full-stack development

Haskell

Java

JavaScript

Typescript

Nix

Python

C++

Ruby

Docker

OpenShift