# **Nathaniel Hill**

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**ACC** 17 AS **Economics** 

18

AS 13 **Engineering TSTC** 





**Physics** 

Comp Sci

### **Lead Engineer**

06/19 - 02/20

**Dialog Engineers** 

Led development of social media app for Android, iOS, and Web with 90% shared codebase using React Native Web (custom Webpack/Babel). Backend built with Neo4j and GraphQL and deployed via Kubernetes on AWS. PWA server rendered for SEO with React and Apollo clientside.

### Senior Fullstack Engineer

06/18 - 06/19

**Network Leader** 

Development of offline-first PWA as lead engineer for leadership consulting startup. Built serverless docker cloud infrastructure with CI/CD pipeline. Implemented backend with Node, Mongo, and GraphQL. Developing real-time front-end with React, Redux Saga, D3, and Next.js.

### Software Engineer

06/16 - 03/18

**Space & Geophysics Lab** 

Maintenance, integration and testing of 500 k-sloc codebase for monitoring GPS satellites. Developed Python bindings for C++ core library and support for new satellite constellations. Built reactive web apps for ionosphere visualization with Node, React, Redux, and D3.

### **Software Engineer**

08/14 - 05/16 Center for Nonlinear Dynamics

Investigation of biological systems beyond the diffraction limit using advanced microscopy. Design and analysis of experiments using LabVIEW, Mathematica and Python. Built REST API with Django for experimental data and a responsive front-end with Meteor & React.

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#### **Engineering Consultant**

06/14 - 05/16

**Fidelis Innovation** 

Consulting in material design, process design, structural engineering, documentation and vendor management. Applied composite materials, light metal alloys and highly engineered content goods to ecological and performance market niches.

### **Prototype Engineer**

02/15 - 06/15

**Applied Physical Electronics** 

Engineering compact, deployable, electromagnetic, pulsed-power warfare tools to US military and defense market. Developed closed-loop process involving rapid prototype design, fabrication, inspection and testing of current-injection systems.

## **Metrology Engineer**

12/13 - 05/14

**Flextronics International** 

Production ramp-up of Apple product line. Programmed metrology lab equipment for dimensional inspection to GD&T specifications and process capability studies. Implemented process improvements to eliminate waste, reduce cycle times and improve quality.

### **CNC Programmer**

08/13 - 12/13

**Sanmina Corporation** 

Programming in high mix environment with SolidWorks and MasterCAM for aerospace, semiconductor, scientific and oil & gas clients. Identified root causes of failures via first article and in-process inspection and implemented corrective and preventative action.