

# Nicholas Waterworth

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## SUMMARY

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Software Engineer seeking full time employment that will provide experience in Artificial Intelligence and Software Design Patterns. I have demonstrated my ability to produce quality outcomes by working independently or collaborating on a startup project. I pursue challenging assignments with a determined sense of urgency and relish in the satisfaction of a job well done.

## EDUCATION

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### Bachelor of Science in Computer Science

University of Arkansas, Fayetteville, AR | GPA 3.798

Expected: May 2020

## ENGINEERING EXPERIENCE

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### Speaker Identification Fayetteville, Arkansas

January 2019 - Present

Created a Keras Neural Network model that used binary classification with MFCC samples of male and female speakers to identify a speaker's gender. I'm currently implementing improvements to feature processing and the scale of what features the model identifies. Future goals include Speaker age, identification and an improved feature extraction technique.

### Engineering Research Colloquium Fayetteville, Arkansas

2016-2017

Created a cybersecurity neural network with a partner through MATLAB, a technical computing language, which detected malicious activity on a network dataset 93% of the time. The research emphasized the handling of big data and training network weights. Our team of two won awards for best paper, project and poster.

## WORK EXPERIENCE

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### L3Harris ISR Systems Greenville, Texas

June 2019-Present

L3 ISR Systems Greenville is a systems integration organization specializing in the modernization of aircraft with development and integration of special mission systems for military and commercial applications.

### Software Engineer Co-Op,

- Collaborated on supervised Feed-Forward Neural Network classification model in C.
- Created a shell script to analyze and document Neural Network performance.
- Automated Python Unit Testing using Mock Objects and Unit Test class.
- Utilized Auto-Documentation frameworks and Github tools.
- Created XML Interface Control Documents.
- Collaborated on a team using Agile methodologies and Jira

### Divy Fayetteville, Arkansas

June 2018-June 2019

Divy is an early stage Startup social media app that aims to redefine social media by personalizing User Experience.

### Lead Software Engineer and Co-Owner

- Created working App Prototype using Ionic Application Framework.
- Created Database and Rules using Amazon Web Services DynamoDB and S3.
- Created User-Based Database Queries using Amazon Web Services Lambda and API Gateway.
- Self-Instructed prototype and Database implementation

## TECHNICAL SKILLS

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- Node.js, Redhat, Keras, Ionic, AWS, OpenGL,
- Novice Java, C, C++, C#, Kotlin
- Intermediate Python 2.7, Python 3, Javascript
- Novice JSON, XML, SQL, Bash