

# Scott Werwath

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## TECHNICAL SKILLS

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<b>Languages</b>	C++, Python, C, C#, Java, Javascript
<b>Frameworks</b>	Tensorflow, MapReduce, NumPy, MPI, Node, .NET
<b>Misc.</b>	Git, Deep Learning, NLP, WebSockets, Relational Databases

## EDUCATION

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<b>University of California, Berkeley</b>	September 2015–Expected May 2019
B.S. Electrical Engineering & Computer Sciences	<i>GPA (major): 3.9, GPA (overall): 3.6</i>

## WORK EXPERIENCE

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<b>Facebook</b>	May 2017 – August 2017
<i>Software Engineering Intern</i>	<i>Seattle, Washington</i>

Designed and built centralized service to parse binaries, cache their symbol tables, and efficiently serve requests for symbolization of address stacks

Integrated new service into profiling tool deployed across every host in Facebook's fleet, reducing its p90 memory usage by 20% and allowing for the use of more accurate sampling techniques

<b>Google</b>	January 2017–May 2017
<i>Software Engineering Intern</i>	<i>Mountain View, California</i>

Developed novel Machine Learning and NLP techniques to disambiguate entity mentions in unstructured text based on linguistic context

Wrote large-scale data processing pipelines for example generation, model training, and model evaluation

<b>CITRIS Foundry</b>	September 2016–December 2016
<i>Engineering Fellow</i>	<i>Berkeley, California</i>

Prototyped embedded systems for Numericall, a DSP and controls startup in the Foundry accelerator

Implemented and optimized linear algebra algorithms for high-performance embedded control systems

<b>SolarCity (division of Tesla)</b>	June 2016–August 2016
<i>Software Engineering Intern</i>	<i>San Francisco, California</i>

Designed and built Node.js WebSocket microservice to enable real time interaction and data streaming between customers and sales representatives

Refactored .NET routes and database schemas, reducing average customer-facing API response time by 75%

## RESEARCH

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<b>UC San Francisco, Institute for Computational Health Science</b>	September 2017–Present
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Writing deep learning models to locate and classify potential lung tumors in 3D Chest CT images

Creating multi-terabyte data pipelines on AWS for data generation, preprocessing, training, and evaluation

<b>UC Berkeley, Energy &amp; Resources Group</b>	September 2016–December 2016
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Developed integrated assessment modeling library for use by the White House, EPA, and other federal bodies to estimate the economic and environmental effects of policy decisions

Augmented Julia library to allow users to run Monte Carlo simulations across computing clusters

<b>UC Berkeley, Computer Sciences Division</b>	January 2016–June 2016
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Developed novel algorithm for solving arbitrary abstract strategy games on distributed systems with MPI

Deployed algorithm to the Savio High Performance Computing Cluster for testing and analysis