

# Benjamin Bolte

Data Scientist

## EXPERIENCE

FALL 2016

Software Engineer Intern

### *Google Handwriting Recognition*

Improved mixed-script online handwriting recognition for Chinese-English and Devanagari-English language pairs by training a TensorFlow model to combine existing models. Designed and built a program to train Generative Adversarial Network for producing handwriting using recurrent neural networks with attention components on a Google-scale computer cluster.

SUMMER 2016

Software Engineer Intern

### *Amazon India Invoicing Platform*

Built three APIs for interacting with the existing India invoicing service, and built a web framework for helping customer-facing product managers answer questions and solve bugs. After finishing the project ahead of schedule, I helped diagnose and fix a Severity 2 issue stemming from configuration issues in AWS, which affected millions of dollars in transactions.

2015 – 2017

Researcher

### *CADSP Lab*

Worked in the Cooperative Analog Digital Signal Processing lab at Georgia Tech. Wrote low-level API for controlling a Field-Programmable Analog Array with an Android phone, and built an Android app using it, which was presented at ISCAS 2016. Experimented with spiking neural network architectures and other ways to improve computational efficiency for neural signal processing.

## COMMUNITY ENGAGEMENT

2013 – 2017 **Co-president**

*Emory Undergraduate Math Majors Association*

2016 – PRESENT **PyData Atlanta**

*Active attendant since its inception*

2016 **Mentor**

*CalHacks 3.0*

2013 – 2014 **Volunteer tutor**

*RAYA after-school tutoring*

+1 (678) 561-3132  
ben@bolte.cc  
ben.bolte.cc  
codekansas

## HONORS

2016 **Facebook Hacker's Cup Round 2**

*One of 2299 worldwide*

2015 **2nd Place, ACM ICPC**

*Southeast Regional ACM Competition*

2014 **Dean's Achievement Scholarship**

*Top merit scholarship at Emory*

2014 **CompNeuro Training Grant**

*NIH Blueprint Grant*

## EDUCATION

2013 – 2017 **BS + MS**

COMPUTER SCIENCE AND MATH  
*Emory University, Atlanta, GA*

## PUBLIC PROJECTS

2016 **keras language modeling**

*Keras Language Modeling tutorial*

2016 **deep learning tutorial**

*Given at PyData Carolinas 2016*

2017 **gandlf**

*Framework for training GANs with Keras*

## COMMUNICATION SKILLS

ENGLISH Native speaker

SPANISH Intermediate conversational

CHINESE Elementary conversational

## SOFTWARE SKILLS

GOOD LEVEL TensorFlow, Theano, Keras, Python, Java, git

INTERMEDIATE Lua,  $\text{\LaTeX}$ , MySQL, C++, Git, LabVIEW

BASIC LEVEL Bash, C, AWS, Google Compute Engine