

I dive in and solve problems. The world exists to be analyzed, understood, and improved.

#### Education

##### NC State University

B.S. Mechanical Engineering

B.A. Science, Tech. & Society

Phi Beta Kappa, Phi Kappa Phi

Summa cum laude

3.9/4.0 GPA

Dec '07

##### Georgetown University

Data Science Graduate Certificate

Jan '17

#### Language

Spanish (conversational)

#### Software

##### Proficient

Python, Javascript, VBA

Git/Github

HTML/CSS

D3

Flask, Grails, Jekyll

scikit-learn, machine learning

SQL, Postgres, MySQL

#### Familiar

Java/Groovy

JQuery

#### Skills

Software project management

Agile software development

Data visualization

Technical writing

Lean startup

# Neal Humphrey

{ DATA SCIENTIST | FULL-STACK DEVELOPER | MUSICIAN | IDEA MAN }

An engineer by training, running my own tech startup launched me into software development. I love figuring out systems, be they human or technical and using data to understand the world. I thrive where flexibility and cross-disciplinary skills are valued.

## Professional Experience

Sept '16 - Nov '17

### Project Manager and Software Developer

*Housing Insights, Code for DC*

Managed a team of 20+ volunteers building an interactive data visualization [website on affordable housing](#) in DC. Responsible for design of project architecture in Python and Javascript. Fifty percent coding, fifty percent project management. Reviewed and merged Github pull requests from volunteers, led user research and interviews, participated in UX design and user testing and worked with partners to promote the tool.

Sept '16 - Dec '16

### Instructor, Data Analytics

*General Assembly*

Taught a [twice weekly class](#) on Data Analytics for mid-career professionals. Topics cover Excel, SQL, and data visualization.

Aug '16 - Jan '17

### Student, Data Science

*Georgetown University School of Continuing Studies*

Completed a 6-month intensive graduate-level certificate [program in Data Science](#) with special emphasis on machine learning and Python programming.

Apr '12 - Feb '16

### Founder + CEO

*Flashband*

Founded and launched a [tech startup](#) for musicians to find collaborators. Closed \$200k seed investment, and managed a team of up to 5 staff.

Used Lean Startup and Agile techniques to build and launch our Grails-based website. Created design specifications for the website including database schema and code structure as well as user stories and interface design. Wrote code for both back-end (Grails/Groovy/Java) and front-end (HTML/CSS/JS).

Led all aspects of the business, from project management to marketing to running in-person events.

Jul '12 - Apr '13

### Global Research Associate

*Collaborative Labeling and Appliance Standards Program*

Designed and coded the [SEAD Street Lighting Tool](#), a tool for calculating light distribution and energy use. Worked with partners to drive tool adoption. The tool has been translated into 3 languages (Fr, Sp, Ru) and is required by the Mexican government for applicants to their street lighting incentive program. Project management and qualitative research.

## Portfolio and Publications

Github profile [\[link\]](#)

Housing Insights tool [\[link\]](#)

D3-boilerplate chart library [\[link\]](#)

Flashband website [\[link\]](#)

SEAD Street Lighting Tool [\[link\]](#)

Selection of Appropriate Weather Files for Building Energy Simulation (ACEEE Summer Study 2010) [\[link\]](#)

Global assessment of appliance standards... (ECEEE 2013) [\[link\]](#)

## Professional Experience (cont.)

Apr '10 - Jun '12

### Project Manager, Senior Associate

Alliance to Save Energy, Buildings & Utilities Team

Provided education and outreach on energy efficient windows through the Efficient Windows Collaborative, including website content, webinars, and conferences.

Elected to the National Fenestration Rating Council Board of Directors.

Apr '13 - May '15

### Senior Associate (part time)

May '07 - Apr '10

### Analyst, Research Assistant

ICF International, Building Energy Efficiency Team

Performed studies of building energy efficiency and developed tools for predicting savings from energy efficiency upgrades. Created and analyzed big data sets of hourly energy use using computer simulations. Coding in Excel VBA.

## Highlights

