

# Speech Synthesis Research Scientist

## About Oben:

Founded in 2014, ObEN is an artificial intelligence company based in one of the world's most successful incubators: [Ideallab](#) in Pasadena, CA. We have developed a sophisticated speech technology that allows any Internet of Things to speak in any voice and in any language.

[Company intro video](#)

[Know more about ObEN's incentives.](#)

## **JOB DESCRIPTION**

### Your responsibilities:

This position is concerned with research and development in advanced speech synthesis. The work will have a particular focus on the development of structured acoustic models which take account of factors such as accent and speaking style, and on the development of machine learning techniques for vocoding. You will have a PhD in speech processing, computer science, cognitive science, linguistics, engineering, mathematics, or a related discipline. You will have the necessary programming ability to conduct research in this area, a background in statistical modelling using Hidden Markov Models, DNN, RNN, speech signal processing, and research experience in speech synthesis.

A background in one or more of the following areas is also desirable: statistical parametric text-to-speech synthesis using HMMs and HSMMs; glottal source modelling; speech signal modelling; speaker adaptation using the MLLR or MAP family of techniques; familiarity with software tools including DNN, Deep Learning, RNN, HTK, HTS, Festival; and familiarity with modern machine learning.

### You will:

- Develop and extend speech synthesis technologies in Oben's proprietary speech synthesis system, in view of the realisation of prosody and voice quality modifications;
- Develop and apply algorithms to annotate prosody and voice quality in expressive speech synthesis corpora
- Carry out a listener evaluation study of expressive synthetic speech.

### You must have:

- PhD (Preferred), M.Sc. in Computer Science or Electrical Engineering
- High proficiency in C++, Python, Java, Matlab

- Experience with data-driven statistical or machine learning methods.
- Enjoys a highly collaborative environment with minimal supervision.
- Experience with speech synthesis

**Great to have:**

- Familiarity with linguistic phonetics.
- Knowledge of basic digital signal processing techniques for audio.
- Experience with software engineering best practices including unit testing, continuous integration, and source control.
- Proficiency in Java/Android, Objective C/iOS, javascript, C#/Unity3D.

## Application Requirements

Please send the following to [careers@oben.me](mailto:careers@oben.me)

- Detailed resume and/or LinkedIn profile
- Links to any research / papers you have been an instrumental part of and are proud of
- Name of instructor / adviser, if any along with link to their profile
- Cover Letter identifying your five favorite apps on your phone

**Interview process:**

STAGE 1: Phone Interview

STAGE 2: In-person Interview at [Idealab](#) (we cover travel expenses for the day)

STAGE 3: We require a sample project submission and a candidate proposal submission

(To know more about what an ObEN candidate proposal is, [click here](#))

STAGE 4: Spend a day at our office and participate in all team activities.

STAGE 5: Offer Letter