

## NRNB Student Profile: Ahmet Çandıroğlu



### Brief introduction

I worked on a biological pathway editor called Newt and its related extensions. It is a web application based on Cytoscape.js library and written in JavaScript. I worked with Prof. Ugur Dogrusoz who was my instructor at the time, and he encouraged me to join GSoC. We worked together on the university campus, which was very productive and gave me the chance to be with my friends as well.

- **Student Project:** <https://github.com/iVis-at-Bilkent/newt>
- **Student Project blog:** <https://bit.ly/gsoc2018-wp>

### Statement from mentor:

I think Ahmet did a fantastic job over the summer with great contributions to our open source projects. Many commercial and academic network visualization tools are based on Cytoscape.js, and with the contributions he made, certain Cytoscape.js extensions will be even more popular among these users.

### Where did you attend university during Google Summer of Code (GSoC)?

Bilkent University, Ankara, Turkey

### How did you find out about GSoC?

I had heard of it before on the Internet, but I learnt about the details when I contacted Prof. Dogrusoz to find out about what I should do to join their open source project and be part of GSoC.

### What factors helped you decide on a GSoC project?

I had added a new feature to Newt before applying to GSoC, which was very satisfying. So, I decided to work on it and improve it as much as I could.

### How did you first hear about the NRNB and Cytoscape.js based projects like Newt?

I wanted to contribute to an open source project and found out that my instructor at the time was accepting undergrads to their project.

### **What problem did you work on?**

I implemented new features, which are meant to improve user experience, and additionally I fixed several bugs.

### **What was your experience with GSoC? How did it compare to your expectations?**

I felt quiet comfortable since we knew each other beforehand and worked in a familiar place. Also, the problems we worked on were interesting and facilitated me to learn new technologies throughout GSoC. Knowing that the open source libraries I contribute to will be potentially used by many others is a great feeling. So, overall it met my expectations.

### **Briefly describe your contributions to the project during GSoC**

- Added background image support for nodes.
- Added edge reconnection support to cytoscape-edge-bend-editing extension.
- Added interactive resize node to its content support to cytoscape-node-resize extension.
- Configured a new server for a daily build of Newt.
- Refactored AJAX requests by routing them to the new server to prevent CORS errors.
- Implemented and tested semantic zooming feature but did not merge it due to its performance issues.
- Fixed miscellaneous bugs.

### **What happened with your project after the end of GSoC?**

We are working on issues which are proposed for GSoC but could not be handled due to time constraint.

### **What you are doing now and what are your next career goals? What role does free / open-source software play in your work?**

I am a senior student in Bilkent University and I want to work abroad after graduation. I use and contribute to open projects both for fun and educational purposes.