

# Vikas Shiva Pydah

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## **EDUCATION**

**Vanderbilt University**, Nashville, TN

Bachelor of Science, Computer Science Degree anticipated May 2017

Minor in Material Science

Current GPA: 3.60

Dean's List: Fall 2013, 2014

**Relevant Courses 2013-14:** Computer Science 101 (Java), Data Structures (C++), Digital Logic

**2015 Spring Courseload:** Intermediate Software Design (Java 8 & Android), Computer Organization (low-level), Discrete Structures, Computers and Ethics, Linear Algebra

## **RESEARCH EXPERIENCE**

**Research Assistant**, November 2013-August 2014

Vanderbilt Institute for Nanoscale Science and Engineering Laboratory, Nashville, TN

- Helped synthesize graphene on copper substrate- flooded hydrogen and methane gas into a furnace, used a PMMA spinner, and used Ferric Chloride to etch away copper
- Analyzed cell-graphene interaction

## **PROGRAMMING SKILLS**

- **Languages:** C++ (proficient), core Java (proficient), JavaScript (prior experience), HTML/CSS (prior experience), MySQL (prior experience)
- **Other:** Java Servlet API (proficient), Android Studio (prior experience)

## **ACADEMIC PROJECTS**

**Guitar Hero**

- Uses the Karpus-Strong Algorithm to convert a txt file with columns representing time and piano notes to a dat file with columns representing time and wave amplitudes – simulates guitar sounds

**Text Twist**

- Stores all English words in Trie and recursively finds all combinations of given letterset

**Word Comparison**

- Uses Maps and Sets to compare documents checking similar word usage

## **OTHER PROJECTS**

**Summer Project: vikasshiva.com (still in development)**

- Implements database that stores id, username, AES encrypted password, email
- Uses database for login, registration, forgotten password retrieval, changing account information
- Contact Us page sends information to web email

**Asteroid Dodger**

- Uses JavaScript and HTML 5 Canvas Element to implement Asteroid Dodger game

## **LEADERSHIP/CAMPUS INVOLVEMENT**

**Vandy Apps**, Vanderbilt University

- Learning Android Studio, have created basic apps with simple UIs

**Interfaith Council Secretary**, Vanderbilt University

- Organize and send Interfaith Newsletter on a biweekly basis
- Keep minutes during biweekly events and board meetings

**Vandy Karma (Hindu organization) Publicity Chair**, Vanderbilt University

- Create event flyers using Photoshop and manage Facebook page

**EVOLVE Leadership program**, Vanderbilt University

- Cultivated and presented leadership development philosophy
- Learned about fostering gender equality, ethnic diversity, and religious diversity in workplace