

# BURAK BIYIKLI

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## EDUCATION

- 📅 2018 - 2022 (expected), B.S. Electrical Engineering, **University of Texas at Austin**, GPA: 3.68, University Honors
- 📅 2016 - 2018, High School Dual Credit Gen. Engineering, **Austin Community College**, GPA: 4.0, Presidential Honors
- 📅 2014 - 2018, High School, **Harmony School of Political Science**, GPA: 4.26, Valedictorian

## EXPERIENCE

### ATE & SLT Intern

#### Advanced Micro Devices (AMD)

- 📅 May 2019 - August 2019    📍 Austin,Texas
  - Worked in SLT (Silicon Level Test engineering) and ATE (Automated Test Equipment) team; Gained experience working on production code and Advantest Testers, Handlers, Firmware, APIs
  - Created Automation scripts, including one that corrected limits within the test program using Python and Bash
  - Wrote test code in Smartest using C++ , Python & Advantest Firmware Commands to add features and enable test time reduction. Test time improvements had value up to a quarter million dollars in the subsequent quarter
  - Worked on real & simulated test equipment that was based on Red Hat Enterprise Linux

### Intern

#### Silicon Labs

- 📅 May 2018 - August 2018    📍 Austin,Texas
  - Automated the simulation of the current, voltage, and capacitance of devices corresponding 1:1 with existing raw data
  - Used Python to process both measured and simulated data. Worked with SpectreMDL, SKILL, and Ocean in order accurately simulate devices. Created visualization tools using Python and HTML5
  - Created new tools to dynamically explore and visualize large data sets
  - Worked with a small team of programmers and engineers to set and meet developmental milestones

### Software Development Intern

#### Vast

- 📅 May 2017 - August 2017    📍 Austin,Texas
  - Utilized existing databases to both create predictive models for pricing and generate reports for users
  - Tracked advertising funnel development and conversion rate metrics
  - Setup and maintained backend infrastructure, including integration of existing APIs and server/DNS management
  - Developed solutions in Swift, Xcode, Java, C , Python and HTML5

### Intern

#### Summer Advanced Research Camp

- 📅 May 2017 - June 2017    📍 Austin,Texas
  - Worked with professors and teachers in order to do original research on neural networks
  - Collaborated with peers to create programs and scripts in Python and C
  - Shared experiences with newcomers on methods of conducting and presenting research

### Apprentice Electrician

#### Elk Electric

- 📅 May 2016 - June 2016    📍 Austin,Texas
  - Worked within bounds available parts to create functional example installation circuits for use in construction

## Skills

(Filled Circles indicate usage in given setting)	Personal	Academic	Professional
Python	●	●	●
C/C++	●	●	●
Java	●	●	●
Linux	●	●	●
Git	●	●	●
Vivado/Verilog	●	●	○
Mathematica	●	●	○
TensorFlow	●	●	○
Swift/Xcode	●	●	○
ARM/Thumb	●	●	○
x86	●	○	○
Lua	●	○	○
Eagle	●	○	○

## ACHIEVEMENTS

- Three time international science fair Finalist and Silver Medalist, Projects on neural networks and solar power
- Scored in the top 1% of the following: ACT, SAT, TSI, SAT Math Subject Test I&II, and in the AMC Competition
- Perfect score in the AP Physics, SAT Physics and AP Computer Science exams
- Commended Score on the PSAT/NMSQT and AP Scholar with Distinction Award from the College Board

## PROJECTS

### Custom CPU

- Created custom 8 bit cpu, designed at the transistor level. Similar in capability to an MOS-6502 processor

### 3D Graphics Engine

- Written to use less than 32kb for RAM+ROM in order to run on a microcontroller
- Rewrote existing graphics library to reduce overhead by taking advantage of LCD's capability