

MARIA PIKUSOVA

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AREAS OF INTEREST Machine Learning, AI, Distributed Systems, Natural Language Processing, Security, Robotics, Mathematical Applications

SKILLS **Languages:** Java, SQL, C, Assembly (MIPS), VHDL, familiar with C++, Python, T-SQL
Tools: Mathematica, Maple, Unix, SVN, Android, Microsoft SQL Server, Arduino, Oracle
Fluent in Russian

EXPERIENCE

AMAZON San Luis Obispo, CA
Position: Software Development Engineer February 2015 – April 2016
Designed and implemented APIs for a new system handling membership logic for Amazon Prime. Ran experiments to validate SLA, metrics, and performance of the new service before deployment. Worked with others to define design requirements, implement thorough test coverage, and integrate new service into existing Amazon code base.
Languages Used: Java

LOCKHEED MARTIN San Luis Obispo, CA
Position: Software Engineer April 2014 – February 2015
Built a robust system for satellite communications for an unmanned aerial vehicle (UAV) addressing the problems of the UAV losing light of sight communications with the control station
Languages used: C, C++

GAINE SOLUTIONS San Luis Obispo, CA
Position: Intern Programmer January 2014 – March 2014
Redesigned a stored procedure for profiling and cleansing data and analyzing large scale data sets to make it more modular, increase flexibility and handle different parameters
Languages used: T-SQL, SQL

EDUCATION **CALIFORNIA POLYTECHNIC UNIVERSITY** San Luis Obispo, CA
B.S. Mathematics/Computer Science minor June 2014
GPA: 3.02
Relevant Courses:
Systems Programming, Embedded Systems, Introduction to Databases, Operating Systems, Linear Algebra, Mathematical Modeling, Numerical Analysis

PROJECTS

ARDUINO MUSIC PLAYER

- A music player that runs on an Arduino and reads data off an SD card
- Thread support and context switching implemented in C and Assembly
- Ext2 file system reader implemented in C

CHORD DETECTOR

- Mobile application for Android that identifies musical chords in real time
- Uses digital signal processing techniques including FFT, window functions, and fundamental frequency detection implemented in Java

HOTEL RESERVATION SYSTEM (team project)

- A system that enables guests to make reservations
- Development of customer, administrator and owner UIs

- Database used was Oracle 10g, written in Java, SQL
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ACTIVITIES

White Hat (Cyber Security) Club at Cal Poly San Luis Obispo, officer (2012-2014)

Amateur Radio Club, officer/extra class licensed amateur radio operator (2012-present)

Entrepreneurial Society at San Jose State University, officer/president (2009 – 2010)

Second Place in the San Jose State University Problem Solving Competition (2009)

Side Projects/Hobbies: CTF and PicoCTF hacking competitions, antenna building (Yagi directional

antenna, j-pole antenna), piano, rock climbing, chess, planning to participate in Sparkfun

Autonomous Vehicle Competition 2016