Ravi Malik

www.linkedin.com/in/ravimalik20

110 Englewood Avenue • Buffalo, NY 14214 • 201-932-4926 • ravimali@buffalo.edu

EDUCATION

University at Buffalo, State University of New York
Buffalo, NY
Master of Science, Computer Science Engineering   May 2019
- Coursework:
  Algorithms for Advanced Computing Systems | Operating Systems | Computer Security

Punjab Technical University, India
Bachelor of Technology in Computer Science Engineering   June 2014
- 4 time winner of best project in semester.
- 3 time winner of university level coding competition.

SKILLS

Web Development: REST API Development, Redis in memory caching, CRON Jobs, MySQL, Laravel Framework
Languages: PHP, Python, C, Bash Scripting, Javascript
Others: Design Patterns, Multithreading

EXPERIENCE

Freelancing, Punjab, India
Software Engineer – LAMP Stack   Jan 2016 – Mar 2017
- Implemented backend for a pollution monitoring system, deployed in 6 locations in India. Data collected from microcontrollers using a REST API and displayed on a web based dashboard.
- Built back-end for a social network, deployed for 7 regions in Europe. Reduced server load by 33%. Back-end interface provided using REST API and Redis used for in-memory caching optimization.

Smartsbee Ltd, Punjab, India
Software Engineer – LAMP Stack   Feb 2015 – Dec 2015
- Enhanced product search / listing functionality of an E-Commerce project and increased response time by 44%. Optimizations on the database made for reduced response time of the server.
- Built document management module for an ERP, reducing paperwork and better sharing of documents. Versioning of documents ensured to reduce storage space.

Newgen Software technologies, Noida, India
Software Engineer   July 2014 – Feb 2015
- Created front-end for a DIY enthusiast crafting machine, with the canvas created using Flex Framework. Used multithreading to ensure smooth transitions between operations.

ACADEMIC PROJECTS

- **PintOS:** Scheduler, Virtual Memory and File System implementations for OS for x86 machines. Implementation involves multithreading and also device driver implementation.
- **PY2CPP:** Python to C++ source code transpiler. Implemented for x86 machines with conversion of Python statements, excluding iterators and lambda functions.
- **Secure File Transfer:** File transfer desktop application using RSA key exchange, AES symmetric encryption and socket programming. Used by the undergraduate university department for transfer of documents.